Agri-Food Canada Agroalimentaire Canada

Financial Situation and Performance of Canadian Farms 2009

Farm Data Analysis Unit
May 2009

Canada

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For
Agriculture and Agri-Food Canada

May 2009

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Farm Data Analysis Unit
Research and Analysis Directorate
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This publication reflects the latest data available as of December 31, 2008.

Electronic versions of Research and Analysis Directorate publications are available on the Internet at www.agr.gc.ca/pol/pub.

Publication 10968E
ISBN 978-1-100-13090-3
Catalogue A38-1/3-2009E-PDF
Project 09-025-r

Aussi disponible en français sous le titre :
« Situation et performance financières des fermes canadiennes 2009 »



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Foreword

This publication is a resource book of statistics on farm income in Canada. Farm income is a complex issue because of the diversity of Canadian farms and agricultural production in Canada.

This resource book focuses on both income and the opportunities and challenges facing Canadian producers to provide a better understanding of the financial conditions of farms and farm families in Canada. Charts, figures and tables with brief accompanying text are used to summarize information and to provide base performance indicators.

Introduction

This publication provides an overview of the trends in farm and farm family income, the diversity of farm businesses and the resulting implications for measurement of the financial health of the industry in Canada. The focus of the analysis is on Canada's diverse farm enterprises as opposed to overall aggregate and average measures of the farm sector. Results from this report are used by farm managers for benchmarking purposes, lending institutions, provincial departments of agriculture and others involved in the management of agricultural or agri-food industries in Canada.

Historically, there have always been important differences in the economic situation of farms because of the differences in farm types, the effects of weather, disease and the stage in the lifecycle of individual farms. However, differences are far more pronounced now than in the past. The sector has become far more diverse and specialized. Farms are often impacted in different ways by changes in economic conditions. Different farms now employ different business strategies to manage risk. In addition to the diversity across farm types, farms have diversified sources of income and assets. Farm family well-being is now based on a combination of both farm and non-farm income and on the significant net worth of most farm owners. As a consequence, many different indicators are needed to understand the well-being of farms in Canada.

This report presents charts and tables with brief accompanying texts on the structure and finances of Canadian family farms. The report describes:

- transformation of Canadian agriculture,
- diversity within the farm sector,
- farm income,
- farm assets, liabilities and net worth,
- farm financial performance ratios, and
- farm family income and the overall economic well-being of farm families in Canada.

The main data sources used in this report are Statistic's Canada's Farm Financial Survey, the Taxfiler Database, the Census of Agriculture, and AAFC's 2004 and 2007 Renewal Surveys. This report reflects the latest data available from Statistics Canada as of December 31st, 2008.

SECTION A

Transformation of Canadian Agriculture

Canadian agriculture is undergoing major transformations in structure. Changes are occurring not only in productivity and farm size, but also in organizational structure, land tenure, and business orientation. Whereas thirty years ago the agricultural sector consisted of a far more uniform set of mixed operations, today's farms are much more diverse in terms of their size, product specialization, business orientation and in terms of the farm's importance to overall household income.

There are a number of forces spurring this transformation including: increased food quality, safety and traceability demands from both processors and consumers; environmental concerns; adoption of technologies and business practices that exploit economies of scale and scope; consolidation further downstream in food processing and retailing; biotechnologies; information technologies; increased use of rental and leasing arrangements as well as other strategies that encourage growth and expand options for resource control; and wider adoption of contracting, strategic alliances and cooperative business models to facilitate more effective and efficient vertical coordination in the production and value chain (Boehlje et al. (2006)).

This section examines some of the forces pushing transformations and opportunities facing Canadian agriculture and the steps the primary agricultural sector is taking to better align themselves for these new opportunities.

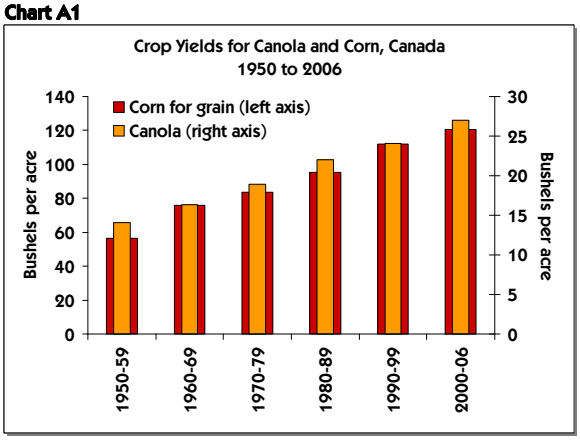
Among the forces pushing structural transformations, technological and genetic improvements continue to push the growth in farm productivity

Crop yields continue to increase as a result of plant breeding and beneficial management practices such as crop rotations, fertilizer and tillage practices.

More sophisticated monitoring and measuring technology that is part of precision farming enables growth in farm productivity. Large farms are the most likely to adopt this type of technology which is managerially time-intensive (Fernandez-Cornejo (2007)).

The development of sophisticated seeding equipment, guidance and auto-steering equipment, and larger planting and harvesting equipment has significantly modified the time constraints faced by grain producers in Canada and the U.S. (Gray and Boehlje (2007)).

Chart A1



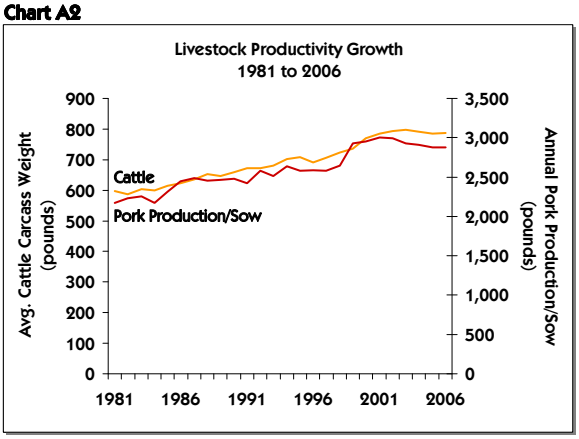
Source: Statistics Canada, Agriculture Division, Field Crop Reporting Series.

Livestock productivity has also increased as a result of genetics, technological improvements, improved feed formulations and other beneficial management practices.

In the last 25 years, cattle carcass weights have increased by 32%.

Over the same period, pork production per sow increased 33%. Larger litter sizes, a decline in feed conversion (kg grain per kg gain) along with an increase in average carcass weights have contributed to productivity gains.

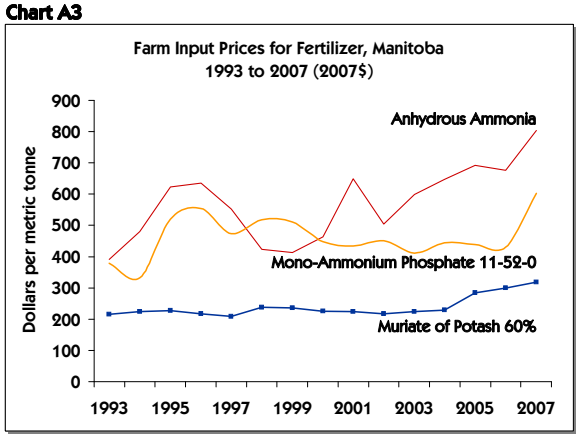
Chart A2



Source: Canadian Beef Grading Agency and Statistics Canada, Livestock Survey and Stocks Survey (Frozen and Chilled Meats).

However, rising input prices are putting a squeeze on farm operating margins forcing farms to adapt to remain competitive

Chart A3



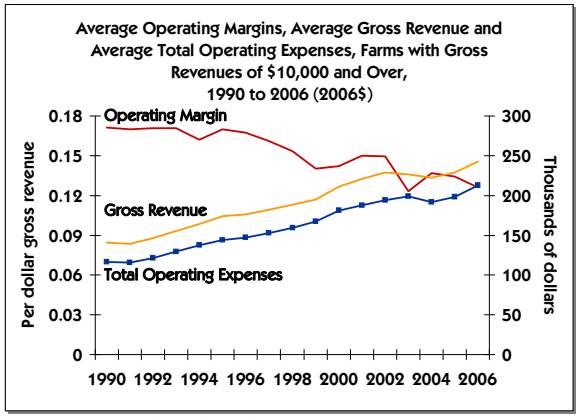
Source: Thomsen's Farm Input Price Survey. Annual prices were calculated by AAFC.

Farm input costs are rising in part due to rising demand for grain and oilseed.

Fertilizer is a world-wide commodity and its price is determined by global supply and demand factors. In the last few years, tight world fertilizer supply has driven up fertilizer prices.

Between 1993 and 2007, anhydrous ammonia doubled in price rising to around $800 per metric tonne by 2007.

Chart A4



Source: Statistics Canada, Taxfiler Database.

Operating margins are declining over time.

Increases in total operating expenses are outpacing increases in gross revenues causing operating margins to decline. Between 1990 and 2006, average gross revenue increased 4.9% per year while average total operating expenses increased 5.5% per year.

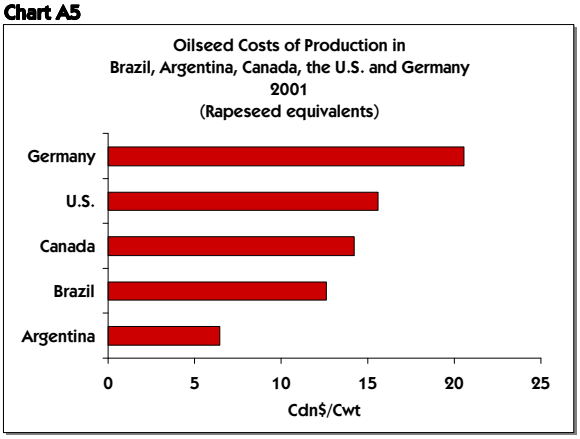
At the same time, operating margins declined 4.5 percentage points from 17.1% in 1990 to 12.6% in 2006.

Other challenges include the emergence of low cost world exporters who are competing for Canada's traditional export markets

Many developing countries, such as Brazil and Argentina, are low cost producers of agricultural commodities and an emerging source of competition for Canadian producers.

The unit cost of soybean production in Argentina, for example, is less than 50% that of canola in Canada.

Chart A5

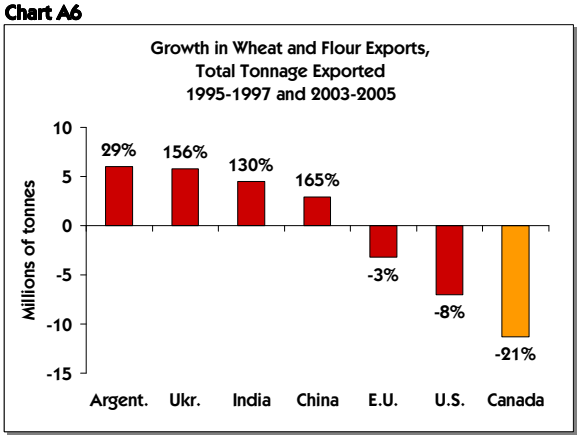


Source: IFCN Germany.

These emerging low cost producing countries are becoming net exporters and are replacing developed countries, such as Canada, the U.S. and the EU(15), in their traditional export markets.

For example, Canadian wheat and flour exports declined by 21% between 1995-1997 and 2003-2005, while exports from emerging economies increased significantly.

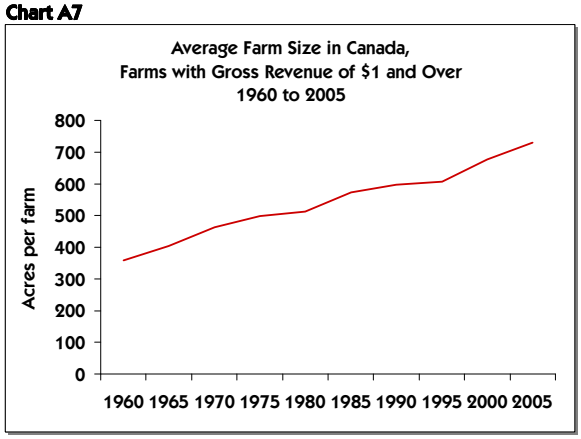
Chart A6



Source: FAO, FAOSTAT database.

To remain competitive, Canadian farms are becoming larger to capture economies of size and as a result the number of larger farms is increasing

Chart A7



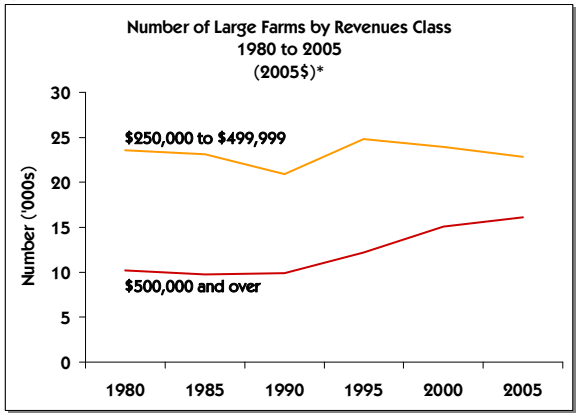
Source: Statistics Canada, Census of Agriculture.

The trend is toward an larger farms.

In the past 25 years, the average size of farm increased by 43% to capture economies of size and scale.

- In 1980, the average farm in Canada was 511 acres. By 2005, it increased to 728 acres.

Chart A8



Source: Statistics Canada, Census of Agriculture.

Note: * Revenue categories based on reference year and are in constant 2005$.

Farms with gross revenue of $500,000 and over are increasing in number.

While farms with gross revenue of $250,000 to $499,999 remained relatively unchanged (declining 3% over the period, the number of farms with gross revenue of $500,000 and over increased 58%.

Half-million dollar farms, with gross revenue of $500,000 to $999,999 increased 42% between 1980 and 2005 to 10,240 farms in 2005.

Million-dollar farms. with gross revenue of $1 million and over, increased 98% to 5,900 farms in 2005.

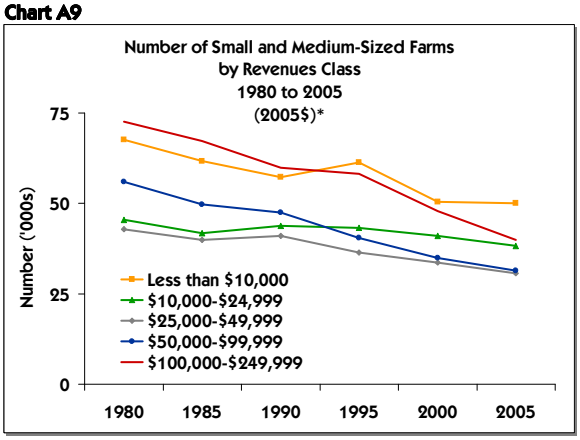
However, as a result of consolidation, the total number of smaller farms in Canada continues to decline

Small to medium-sized farms are declining in number as larger farms expand.

The number of small to medium sized farms with less than $250,000 in gross revenue decreased by 33% between 1980 and 2005.

- Farm numbers declined less for smaller farms. Farms with gross revenue of between $10,000 and $24,999 had the lowest decline in farm numbers at -16% of farms.
- Over the same period, medium-sized farms with $100,000 to $249,999 in gross revenue had the largest decline in farm numbers (-45%).
- Some of the decline in numbers is because a number of farms expanded the size of their operations and moved into the larger size category of $250,000 and over in gross revenue.

Chart A9



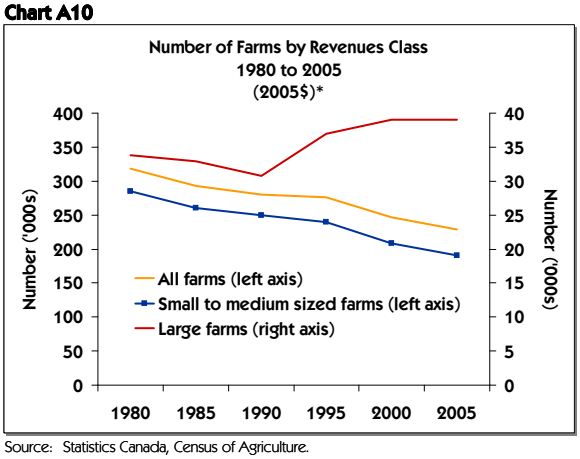
Source: Statistics Canada, Census of Agriculture.
Note: * Revenue categories based on reference year and are in constant 2005$.

Due to the continued decline in smaller farms, the total number of farms in Canada is declining.

Large farms, with gross revenue of $250,000 and over, increased 15% to 38,980 farms in 2005.

At the same time, the number of small to medium sized farms with less than $250,000 in gross revenue decreased by 33%. The total number of farms in Canada declined 28% between 1980 and 2005 to 229,373 farms.

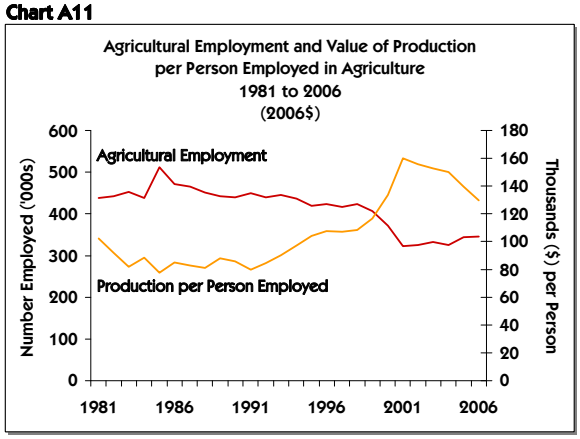
Chart A10



Source: Statistics Canada, Census of Agriculture.
Note: * Revenue categories based on reference year and are in constant 2005$.

Nevertheless, despite the decline in farm numbers, production is increasing in Canada

Chart A11



Source: Statistics Canada, Labour Force Survey and Statistics Canada, Agricultural Economic Statistics.

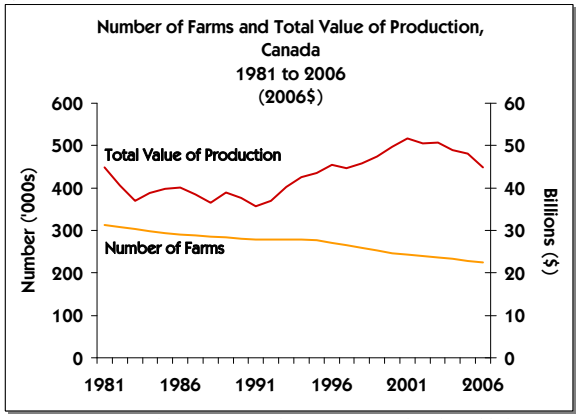
Increased mechanization and other technological advances has allowed farmers to produce more with less labour input.

Between 1981 and 2006, the number of persons employed in the agricultural sector was 79% of the 1981 level declining from 438,000 to 346,000 people.

During the same period, the total value of agricultural production remained unchanged.

On a per person basis, however, production increased by 27% per person employed in agriculture.

Chart A12



Source: Statistics Canada, Census of Agriculture, Statistics Canada, Value-Added Account, and AAFC internal estimates of farm numbers for non-census years.

With increased productivity, more is produced by each farm.

In 1981, an estimated 313,000 farms produced farm revenues valued at $45 billion. In 2006, farm numbers dropped by 28% while still producing revenues valued at $45 billion.

On per farm basis, the value of production increased by close to 40% in real terms.

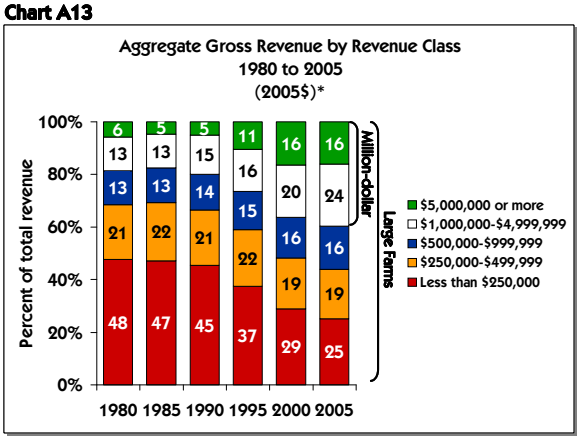
Specifically, million-dollar farms are increasing in importance as production becomes more heavily concentrated on larger farms

Million-dollar farms now account for 40 percent of aggregate gross farm revenue.

In the past 25 years, gross revenue generated by farms with between $1 and $5 million in gross revenue more than doubled in Canada. In 2005, they generated 24% or $10 billion in gross revenue.

Gross revenues generated by five million-dollar farms increased 42% to $6.8 billion and now account for 16% of gross revenues in Canada.

Chart A13



Source: Statistics Canada, Census of Agriculture.

Note: * Revenue classes based on reference year and are in constant 2005$.

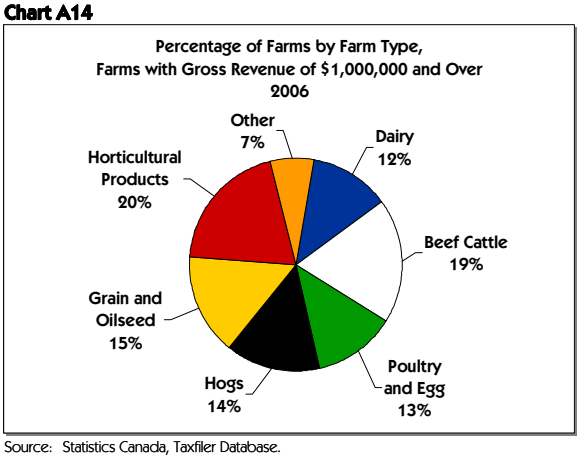
Million-dollar farms are concentrated in certain farms types.

Horticulture and hog farms account for one-third of million-dollar farms.

While poultry, hogs, dairy and horticultural operations are less predominant in the farm population as a whole, they are much more predominant among farms in the million-dollar revenue class.

NOTE: A farm must earn at least 50% of their agricultural sales revenue from one commodity or commodity group to be classified under a particular farm type.

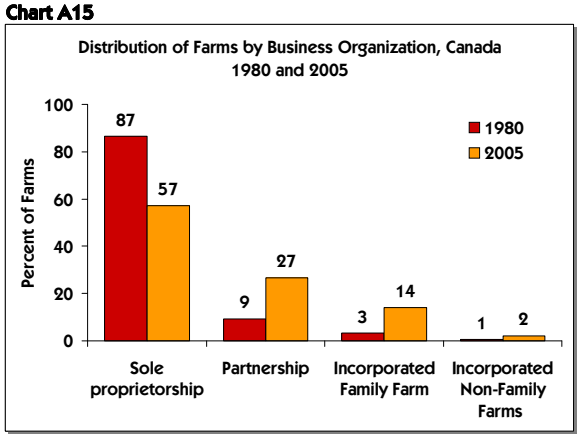
Chart A14



Source: Statistics Canada, Taxfiler Database.

An increasing number of farms are also incorporating, however, most are still family businesses

Chart A15



Source: Statistics Canada, Census of Agriculture.

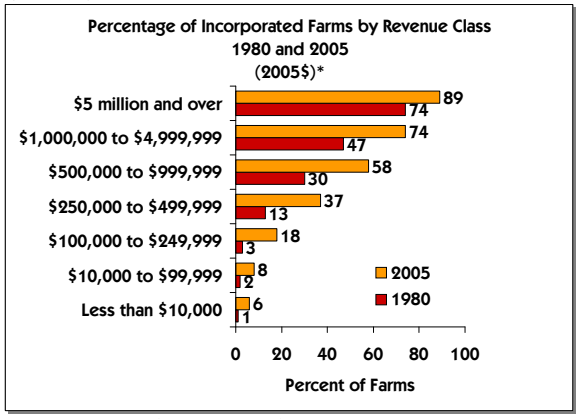
The Canadian farm business organizational structure is moving towards more complex ownership arrangements.

Family farms have remained a stable part of Canada's rural landscape. In 2006, there were approximately 229,000 farms in Canada of which 98% were owned and operated as family farms.

Over the last 25 years, partnerships and incorporated family farms increased by 17% and 11%, respectively.

While the majority of Canadian farms are sole proprietorships at 57%, this percentage declines with revenue class.

Chart A16



Source: Statistics Canada, Census of Agriculture.

Note: * Revenue classes based on reference year and are in constant 2005$.

Within each revenue class the share of incorporated farms has increased.

The larger the farm, the more likely that it is incorporated.

Million-dollar farms are the most likely to be incorporated.

- In 2005, 74% of farms with $1 million to $4.9 million in gross revenue were incorporated and 89% of five million-dollar farms were incorporated.

Farms are not only increasing in size but are becoming more specialized

A larger percentage of farms are becoming highly specialized.

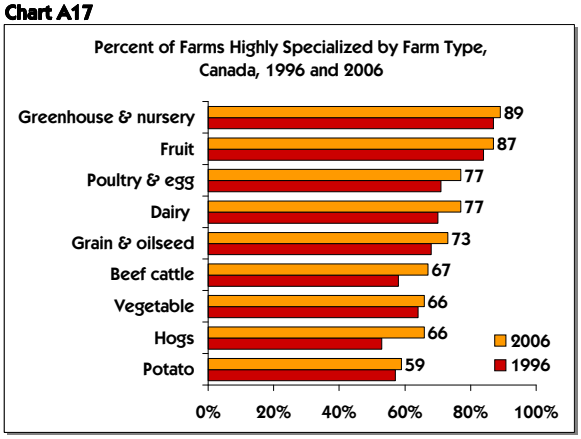
Between 1996 and 2006, there was a 5% increase in the proportion of highly specialized farms.

Farms specialized in hogs, beef and dairy production showed the largest increase in proportion of highly specialized farms, increasing 13%, 9% and 7% percentage points, respectively, over the past 10 years.

Potato farms tend to be the least specialized due to the need to rotate their crops annually.

NOTE: A highly specialized farm earns 90% or more of their agricultural sales revenue from one commodity or commodity group.

Chart A17



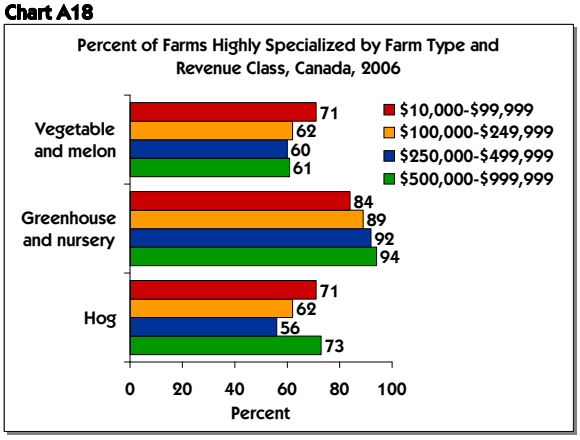
Source: Statistics Canada, Taxfiler Database.

There is a tendency for small farms and very large farms to be highly specialized.

Whether a farm is likely to be highly specialized depends to some degree on the commodities they are specialized in and the size of farm.

- For some farm types, smaller farms tend to be highly specialized compared to larger farms. This particularly true for farms specialized in vegetable & melon production.
- For greenhouse and nursery farms, larger farms tend to be highly specialized compared to smaller farms.
- For hog farms, the distribution is more bimodal. Both small farms and very large farms are more likely to be highly specialized compared to other size categories.

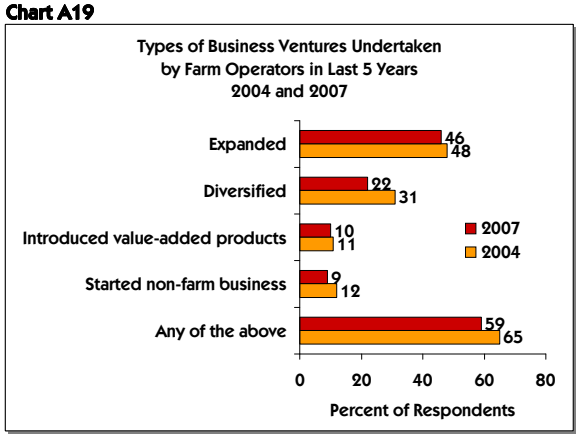
Chart A18



Source: Statistics Canada, Taxfiler Database.

To remain competitive, Canadian farmers are undertaking new business ventures and capturing marketing opportunities in a variety of ways

Chart A19



Source: Agriculture and Agri-Food Canada, 2004 and 2007 Renewal Surveys.

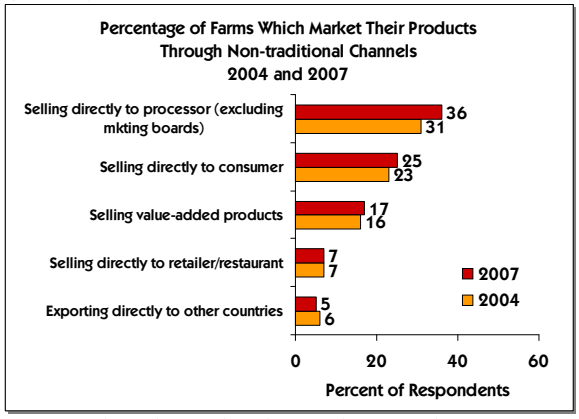
Over half of farms are involved in new business ventures.

In 2007, 59% of producers have undertaken some type of new venture by expanding, diversifying, introducing value-added products and/or starting a non-farm business.

The most common new business venture was farm expansion.

The next most likely venture was to diversify the farm operation by producing an agricultural commodity new to their farm, although this type of change was less common than in 2004.

Chart A20



Source: Agriculture and Agri-Food Canada, 2004 and 2007 Renewal Surveys.

Producers are dealing directly with various points along the value-added chain.

More than half of farms sell at least some of their products through non-traditional channels such as selling directly to food processors.

Selling directly to a processor was most common, followed by selling directly to consumers and selling value-added products. All of these increased since 2004.

Only 5 percent of farms sell directly to other countries. This percentage is down from 2004, which may be reflecting the impact of BSE on cattle marketings.

Traditional methods of marketing include selling through auction markets, marketing boards and cooperatives, and grain and feed companies.

Producers are also changing the way they manage their operations given concerns over food safety and quality

Producers are taking steps to address consumer and processor concerns over food safety and quality.

The number of farms with a written food safety and quality farm plan increased since 2004. In 2007, one-quarter of producers had a written plan in place.

Similarly, in 2007, one-quarter of producers or their employees recently received training (within last 5 years) in food safety and quality.

Chart A21

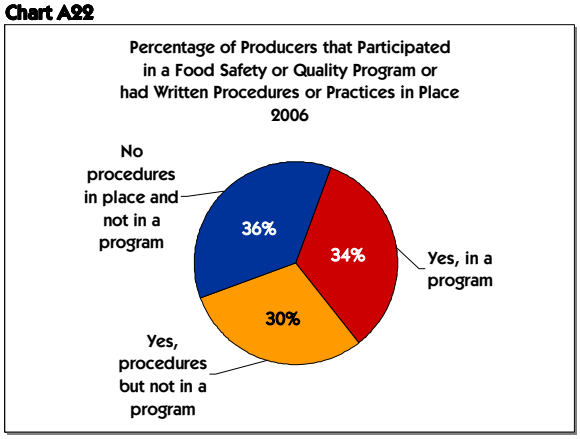
Source: Agriculture and Agri-Food Canada, 2004 and 2007 Renewal Surveys.

When available, the majority of farms participate in food safety and quality programs or have procedures in place.

Food safety and quality programs are currently available for farms that produce dairy products, beef cattle, hogs, and poultry.

In 2006, one-third of farms participated in a food safety or quality program and another third had procedures in place.

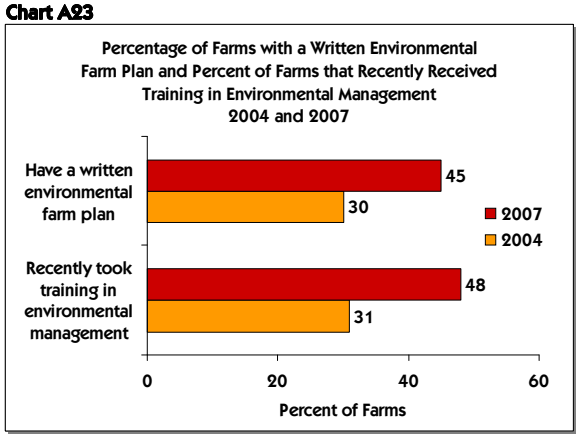
Chart A22



Source: Statistics Canada, Farm Financial Survey, AAFC internal calculations.

Environmental concerns are also changing the way farms operate

Chart A23



Source: Agriculture and Agri-Food Canada, 2004 and 2007 Renewal Surveys.

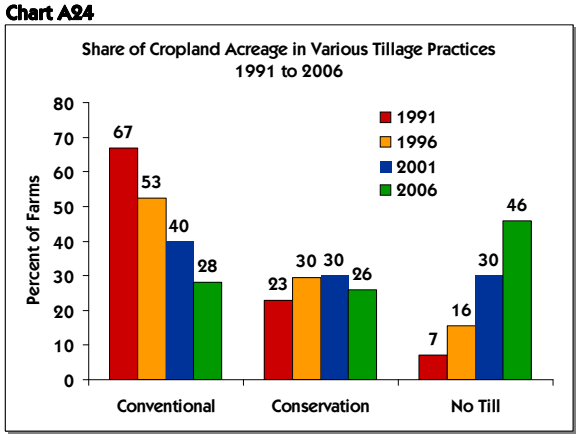
An increasing number of farms have taken training in environmental management and have an environmental plan in place.

Close to one-half of farms have an environmental farm plan (EFP) and have recently received training in environmental management.

Environmental farm planning provides farmers with tools to manage their operations in an environmentally responsible manner.

Producers who develop an EFP have an increased awareness of environmental risks and benefits on the farm, and potential solutions for managing them.

Chart A24



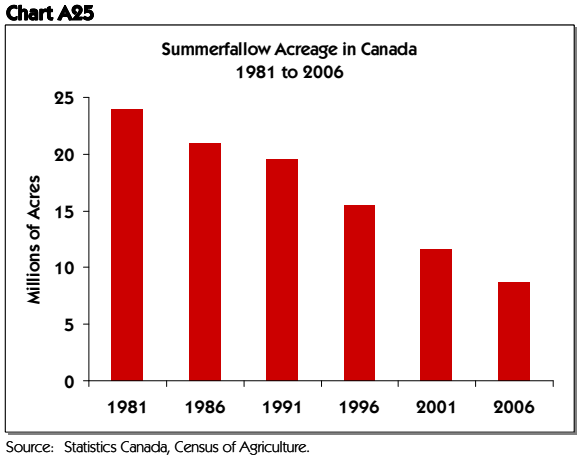
Source: Statistics Canada, Census of Agriculture.

The use of beneficial environmental management practices is increasing across Canada.

Conventional tillage is declining with the adoption of environmentally-friendly land management practices such as no-till and conservation tillage.

Increased use of soil conservation practices translates into increased crop yields, decreased soil erosion, reduced greenhouse gas emissions and long term agricultural sustainability.

Chart A25



Source: Statistics Canada, Census of Agriculture.

With the shift to more environmentally friendly tillage practices, summerfallow acreage is declining.

Between 1981 and 2006, summerfallow acreage declined 64% in Canada.

The potential of the bioeconomy is growing and providing new opportunities to the agricultural sector

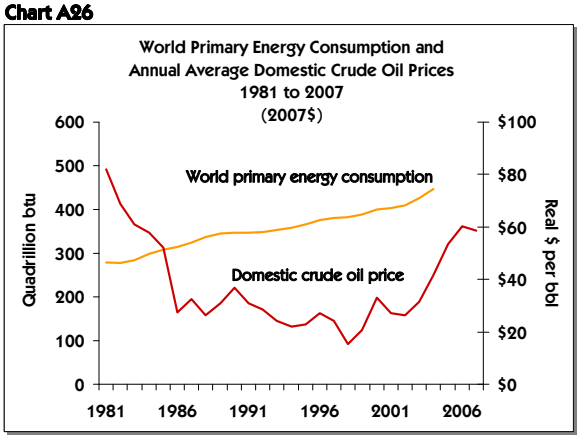
With recent increases in demand for oil which have driven up oil prices, production of biofuels is now potentially profitable.

Crude oil prices have risen in response to increased demand for energy from emerging high growth economies, such as China and India, and from political uncertainty in the Middle East and Africa.

At current oil prices, biofuel technologies that were previously uneconomical, even with government support, are now feasible. However higher prices for corn and wheat as biofuel feed stocks are offsetting the higher oil price benefit.

The rising price of oil represents both a challenge and an opportunity in that it brings higher input costs and fluctuations in prices, but also makes alternative energy options economically feasible.

Chart A26



Source: Energy Information Administration, International Energy Annual.

Increasing demand for grain and oilseed used in biofuel production and increasing demand in China and India are driving up the prices of these commodities.

As a result of increased demand, the prices for grains and oilseeds have risen over the past year. The most significant price increases were for soybeans which rose 52% and corn which rose 37% between September 2007 and 2008.

The capacity to expand production is limited by the amount of suitable land with increased production achieved in part by reducing production of other crops.

Chart A27

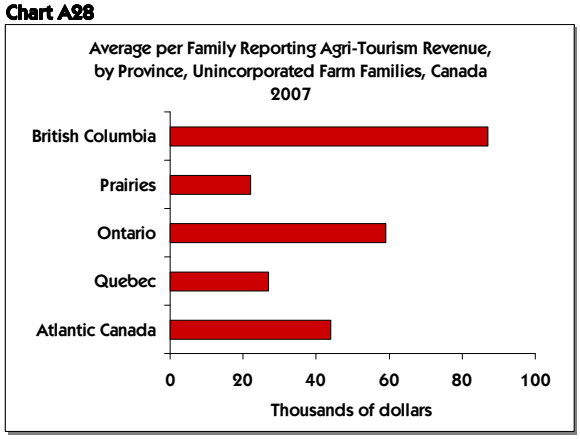
Commodity Prices,
October 1, 2007 to September 29, 2008

COMMODITY	LATEST SEPT 29/08	WEEK AGO	MONTH AGO	YEAR AGO
Wheat, Thunder Bay, Western feed wheat, cash, $/tonne	250.00	250.00	285.00	223.00
Corn, Chatham, No. 2 yellow, Track price, $/tonne	229.18	231.72	231.23	167.10
Soybeans, Hamilton, 48% Protein, $/tonne	496.81	430.45	466.71	326.61

Source: AAFC, Market Analysis Division. September 29, 2008.

Agri-tourism is providing new opportunities for farm families and the rural economy

Chart A28



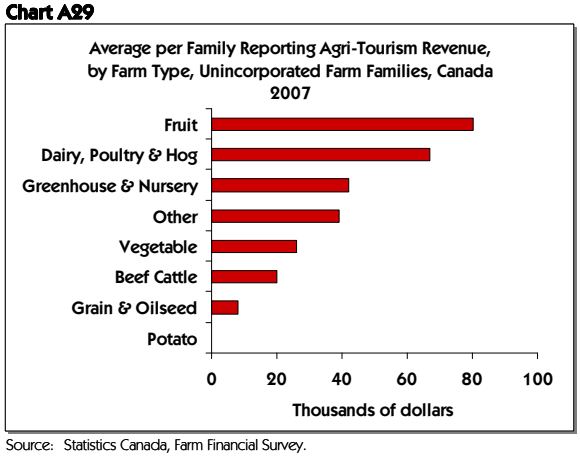
Source: Statistics Canada, Farm Financial Survey.

Agri-tourism is an important revenue stream for some farm families.

In 2007, $100 million dollars was generated through agri-tourism. While only 1.5% of farm families reported receiving agri-tourism revenue, the average amount received per family reporting was $42,000.

Farm families in British Columbia and Ontario received the highest amount in agri-tourism revenue.

Chart A29



Source: Statistics Canada, Farm Financial Survey.

Agri-tourism is an important revenue stream for some farm families.

In 2007, families operating fruit and tree nut farms reported receiving the highest agri-tourism revenue, the average amount received per family reporting was $80,000.

At the same time, families operating potato, grain and oilseed and beef cattle operations received the least amount in agri-tourism revenues.

Given the challenges farmers face including narrowing margins, non-farm sources of income provide additional stable sources of income for the farm family

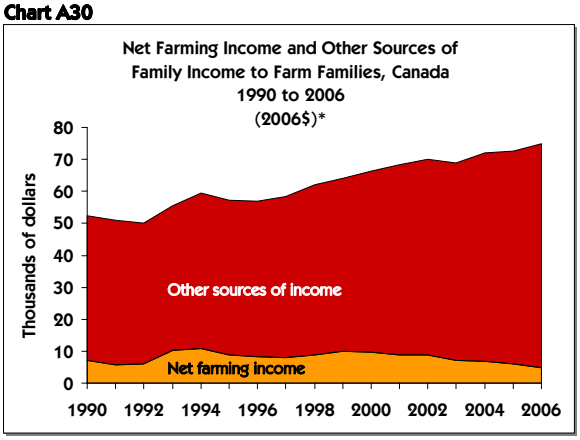
Farm family income continues to increase in real terms due to rising non-farm income.

Between 1990 and 2006, average family income of Canadian farm families increased 42% in real terms, to $74,920 in 2006.

While total farm family income is increasing, the share of net farming income to total family income is declining. Over the period, the family's reliance on net farming income declined from 13% to 7% of family income with other income sources in particular wages and salaries making up for the difference.

When comparing farm families to their non-farm rural and urban counterparts, average farm family income actually exceeded that of the average non-farm family (See Section F, Family Income).

Chart A30



Source: Statistics Canada, Census of Agriculture.
Note: * Revenue classes based on reference year and are in constant 2006$.

Non-farm income is earned from a variety of sources, some with close connections to the farm.

Wages and salaries is the most important source of family income. In 2006, wages and salaries accounted for 59% of family income with about one quarter earned for farm work.

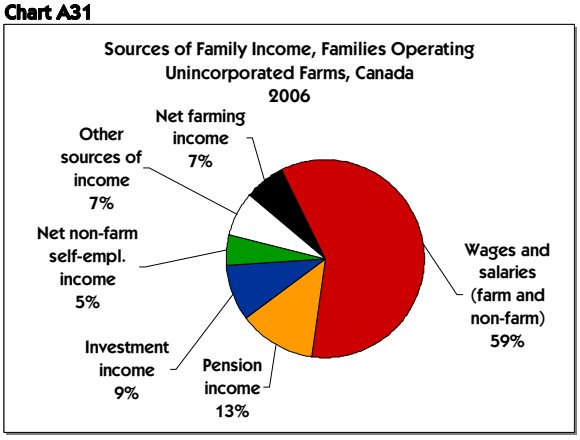
Non-farm self-employment income accounted for 5% of family income with slightly less than one-quarter of farms reporting this income source.

Pension income accounted for 13% of family income. One-third of farm families currently report pension income.

Investment income accounted for 9% of family income. Besides income earned from non-farm investments, it includes the taxable amount of dividends received from ownership of an incorporated farm business as well as land rental income.

Other sources of non-farm income accounted for 7% of family income. It includes agri-tourism, one of the more recent ventures that some farm families are involved.

Chart A31



Source: Statistics Canada, Taxfiler Database.

SECTION B

Diversity Within Canada's Farm Sector

Farm operators and farm families in Canada are a diverse group. Farm operators vary by age, experience, business intentions and goals. Farms are operated by individuals on either a part-time or full-time basis, who come from different generations, from multiple families or by non-family farm organizations (Hoppe et al, 2007). Farms vary in product specialty, being either highly-specialized or diversified in the products they produce. They range in size from small pension farms to very large million dollar operations. Business decisions, from choice of technology to choice of specialization, are often influenced by non-farm commitments and income.

This section examines in detail the diversity of farms in Canada. The financial characteristics of the various groups are analyzed including the important trends currently affecting family farms in Canada.

To better understand the diversity in the farm sector, AAFC's farm typology is used to classify farms into homogeneous groups. Although the farm typology developed by AAFC is not directly comparable, it is similar in many respects to the typology classification of the Economic Research Service (ERS) of the United States Department of Agriculture (USDA).

There have been two major changes to Canada's typology definitions since it was last published. First, the pension group now includes only small farms with gross revenues of $10,000 to $99,999 and medium-sized farms with gross revenues of $100,000 to $249,999. Second, the low-income group is defined using Statistics Canada's Low Income Measures (LIM) and includes only small and medium-sized farms[1]. The change to the LIM cutoff for the Low-Income group provides a more systematic method of determining the income cutoffs from one year to the next.

1. *The LIM is equal to 50% percent of median adjusted family income, where "adjusted" takes into account the number of adults and the total number of family members. The LIM estimates vary depending on the size of the family.*

Canadian Farm Typology Definitions

This farm classification focuses on the "family farm" or any farm organized as a sole proprietorship, partnership, or family corporation. Family farms exclude farms organized as non-family corporations, communal operations, cooperatives, etc.

The farms are sorted into ***eight mutually exclusive groups*** based on: the farm's organizational structure, age of the oldest operator, dependence on non-farm income, total family income and revenue class.[2] They are sorted in the order given below.[3]

Pension Farms

Single generation family farms with gross revenues of $10,000 to $249,999 in which the oldest operator is either 60 to 64 years of age and receiving pension income or over 64 years of age, and where the children are not involved in the day-to-day operation of the farm. This group represents those farmers approaching or in retirement who may be downsizing or will be in the process of selling off their farm operation in the next few years. It is expected that these farmers would not readily adopt new technology at this stage in their life cycle. Therefore, by segmenting these farmers, it is easier to determine the impact of policies on other farm operators – policies that encourage the adoption of new technologies or the acquisition of new skills – policies that would not appeal to those in the pension group.[4]

Lifestyle Farms

Family farms with gross revenues of $10,000 to $49,999 in which the farm family receives non-farm income of $50,000 or more. These farm families rely almost exclusively on non-farm employment income for their main source of livelihood, and operate a farm for reasons of "lifestyle" choice. They do not report significant net operating income or large assets.[5]

Low Income Farms

Family farms with gross revenues of $10,000 to $249,999 in which the farm family receives total family income below Statistic's Canada's Low Income Measure (LIM). In 2006, this amounted to $34,874 in family income before taxes for a family of four with 2 adults and 2 children.[6] This group represents those farms and farm families that are struggling financially. Like the previous group, these farmers rely almost exclusively on non-farm income for their main source of livelihood, although this income source is inadequate.

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2. *Family versus non-family farm.*
3. *Typology definitions have changed from previous years and are not directly comparable with previous analyses.*
4. *This group excludes multi-generational farms, where both the parents and children are involved in the day-to-day operation of the farm.*
5. *Hobby farms, those with less than $10,000 in gross revenues, are not included in the typology breakdown due to the limited data available for this group.*
6. *Statistic Canada's Low Income Measure is based on a family's before tax income, which is equivalent to net farming income for tax purposes (R2050 – R2150) plus non-farm income (T6100). Taxfiler estimates used this method to identify farm families below LIM. For Farm Financial Survey calculations, an estimate of capital cost allowance (CCA) was added to net operating income to determine the LIM cut-offs.*

Business-Focussed Farms

The remainder of family farms fall into the business-focussed group. They are further separated based on the size of operation.

Small Business-Focussed Farms

Those farms with gross revenues of $10,000 to $99,999 that do not fall into any of the previous categories (i.e. pension, lifestyle and low income). Due to the small size of their operations, they rely heavily on non-farm income, however, they tend to operate more efficiently than other farms of the same size and have higher operating margins.

Medium Business-Focussed Farms

Those farms with gross revenues of $100,000 to $249,999 that do not fall into any of the previous categories. They rely on both farm and non-farm sources of income to support the farm family.

Large Business-Focussed Farms

Those farms with gross revenues of $250,000 to $499,999. These are commercial-sized farms operated by families that generally receive more than 50 percent of their total family income from the farm.

Very Large Business-Focussed Farms

Those farms with gross revenues of $500,000 or more. This group includes million-dollar operations.

Non-Family Farms

This group includes farms organized as non-family corporations, cooperatives or communal operations. It also includes farms held in estates or trusts.

As a whole, Canada's farm sector is quite diverse due to the varied business intentions and goals of producers and the commodities they produce

Close to 50% of farms, with gross revenues of $10,000 and over, are classified as business focussed.

Close to half of farms (49%) are business-focused ranging from small farms with gross revenues of $10,000 to $99,999 to very large farms with gross revenues of $500,000 and over.

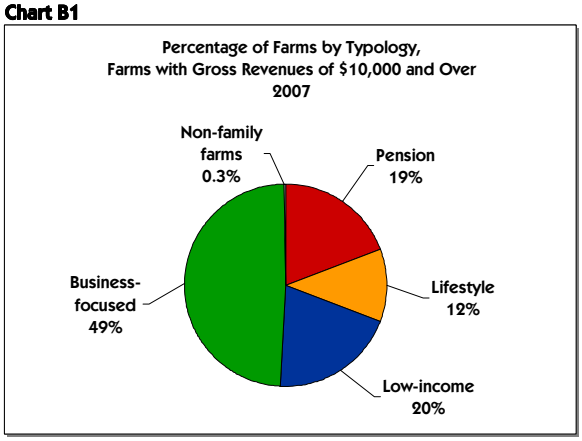
The pension group represents 19% of farms in Canada. Farm operators in this group are of pensionable age and are more likely to be downsizing or selling their operations in the next few years.

Lifestyle farms account for 12% of farms. This group does not include the hobby farm group with gross revenues of less than $10,000.

About one-fifth of farms are in the low income group.

Non-family farms represent less than 0.3% of farms with gross revenues of $10,000 or more.

Chart B1



Source: Statistics Canada, Farm Financial Survey.

Product specialization varies by typology.

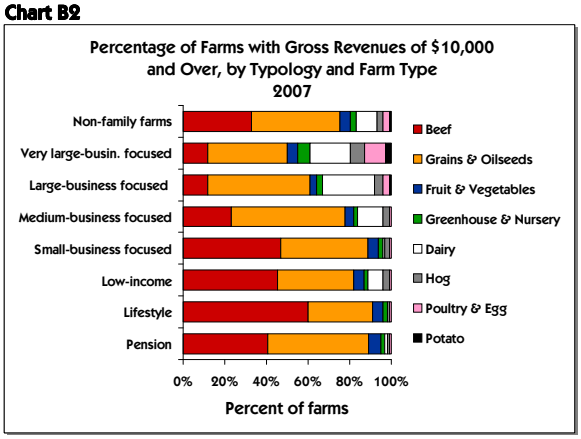
Farms in the pension, lifestyle, low-income and small business-focused categories have the highest concentration of beef cattle and grain and oilseed operations.

Medium, large and very-large business-focused groups include the highest concentration of dairy operations.

The very large business-focused group has the highest concentration of greenhouse and nursery, and poultry and egg operations.

Non-family farms have the highest concentration of hog operations.

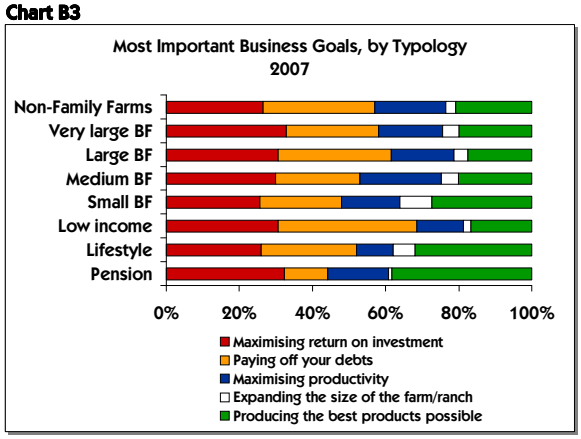
Chart B2



Source: Statistics Canada, Farm Financial Survey.

Business and personal goals vary by typology group and have a large impact on farm business behaviour

Chart B3



Source: AAFC, 2007 Renewal Survey.

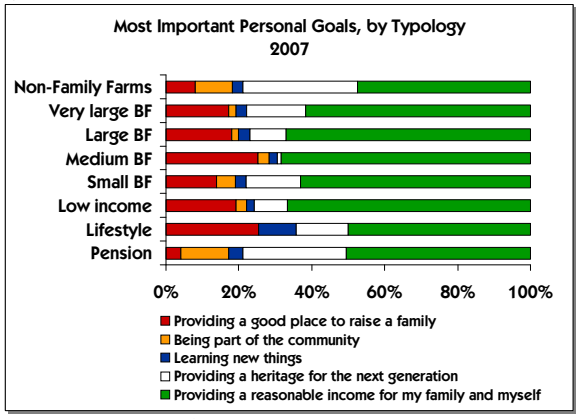
Business goals vary by typology group.

The pension group is more focussed on producing the best products possible and maximizing return on investment. Given that the pension group is in the down-sizing stage of the family-firm's life cycle, they tend to hold less debt and as a result the group is less focussed on paying off their debts.

The low-income group is much more focussed on paying off their debts which is likely due to the heavy burden debt places on their limited family income.

Expansion is of less importance to the pension, low income and the non-family farm groups.

Chart B4



Source: AAFC, 2007 Renewal Survey.

Personal goals also vary by typology group.

Providing a reasonable income for the family and operator is the main goal of the majority of producers in all groups.

The pension and non-family farm groups are more focussed on providing a heritage for the next generation and being part of the community as opposed to providing a good place to raise a family.

The lifestyle group is more focussed on providing a good place to raise a family. In addition, a higher percentage of operators in this group are focussed on learning new things.

The medium business-focussed group is more focused on providing a reasonable income for their family but much less focussed on providing a heritage for the next generation.

Business-focussed farms along with non-family farms tend to operate their farms more efficiently, yielding positive gross margins

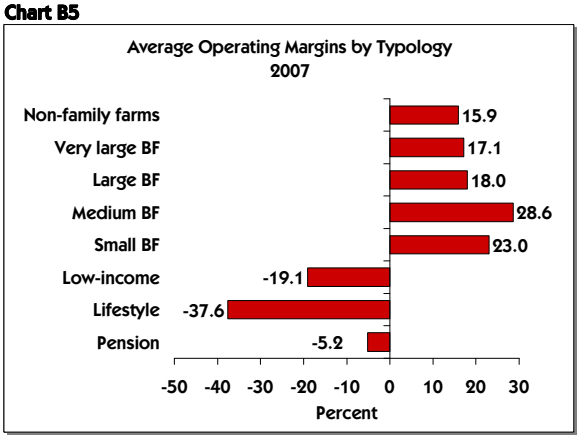
Both the business-focussed group and non-family farm group reported positive operating margins.

The medium business-focussed group reported the highest average gross margin at 28.6 cents per dollar of gross revenue in 2007. This is due in part to the exclusion of those that had family income below LIM.[7]

Within the business-focussed group, the very large business-focussed group tends to report the lowest operating margin. This group is able to operate on narrow margins due to their higher sales volume, which is reflected in the high concentration of greenhouse and nursery, and poultry and egg operations.

Pension, lifestyle and low-income farms reported negative margins. Lifestyle farms reported the largest negative margin, with a loss of 37.6 cents per dollar of gross revenue in 2007.

Chart B5



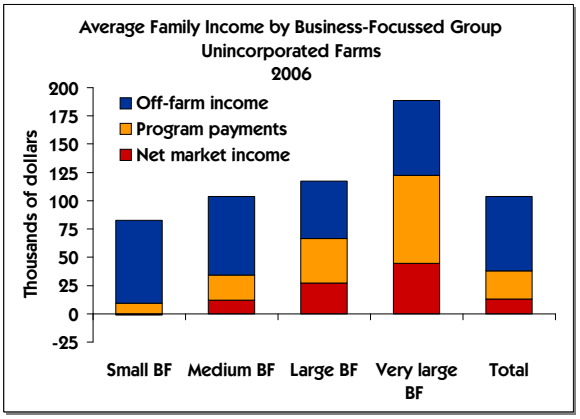
Source: Statistics Canada, Farm Financial Survey.

Large and very large business-focussed farms depend heavily on income from the farm to support their family.

Small and medium business-focussed farms have a greater reliance on non-farm sources of income and less reliance on net market income and program payments.

Large and very large business-focussed farms earn a greater portion of their total family income directly from the farm.

Chart B6



Source: Statistics Canada, Taxfiler Database.

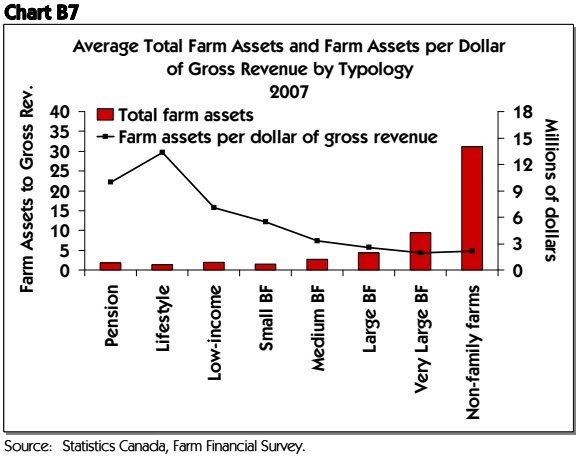
The business-focussed group and non-family farms manage their businesses more effectively than other farms.

Very large farms and non-family farms are most effective in managing their farm assets. In 2007, these two groups required $4.3 and $4.8 in farm assets to generate a dollar in gross revenue.

Large and medium business-focussed farms also operated their farms effectively with the assets they held, requiring $5.7 and $7.4 of assets, respectively, to generate a dollar in gross revenue.

Lifestyle, pension, low-income and small business-focussed groups tend to be less effective at managing their resources, requiring between $12.2 to $22.1 in total assets to generate a dollar in gross revenue in 2007.

Chart B7

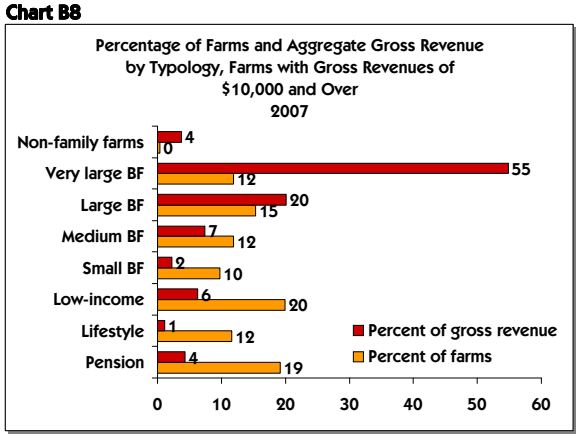


Source: Statistics Canada, Farm Financial Survey.

7. In 2006, family income low income measure for a family of 4 was $34,874. This includes deductions for the capital cost allowance (depreciation) and other non-cash items.

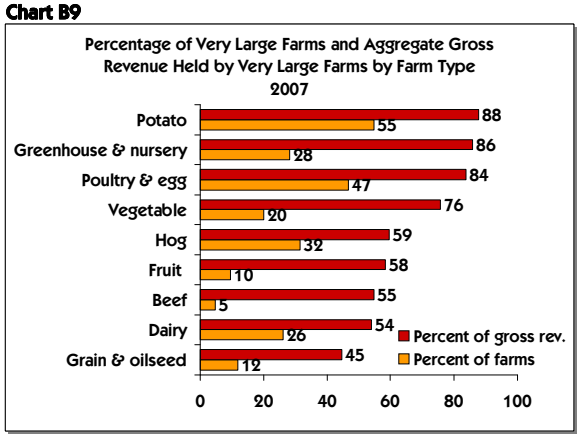
Very large business-focused farms generate half of aggregate gross revenue in Canada, however this is not the norm across farm types

Chart B8



Source: Statistics Canada, Farm Financial Survey.

Chart B9



Source: Statistics Canada, Farm Financial Survey.

Very large business-focused farms generate almost half of aggregate gross revenues in Canada.

Production tends to be concentrated on large and very large business-focussed farms.

Large business-focussed farms account for 15 percent of farms and generate 20 percent of total gross revenue while very large business-focussed farms account for 12 percent of farms but over half of total gross revenue in Canada.

Pension, lifestyle and low-income farms account for half of farms (51%) in Canada with gross revenues of $10,000 and over but generate only 12 percent of total gross revenue.

Small business-focussed farms (with less than $100,000 in gross revenues) and medium business-focussed farms (with gross revenues of $100,000 to $249,999) account for 22 percent of farms in Canada and generate 10 percent of total gross revenue.

However, the contribution of very large farms varies by farm type.

Very large, business-focussed farms specialized in potato, greenhouse and nursery operations and poultry operations generate over 80% of aggregate gross revenues for these farm types.

In contrast, contributions by very large grain and oilseed farms were only 45% of aggregate gross revenues generated by grain and oilseed farms in 2007.

Pension farms are less likely to make major new farm investments, since they may be downsizing, selling or transferring their farm in the next few years

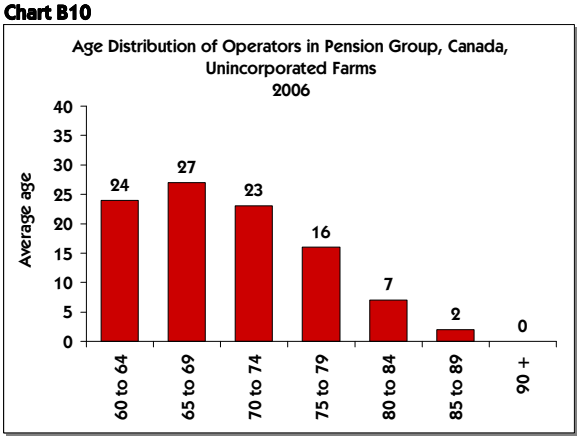
The majority of operators in the pension group are younger than 70 years of age.

In 2006, 51% of farms were managed by operators between 60-69 years of age.

There are fewer operators 60-64 years of age because not all operators in this category have retired and started collecting pension income.

According to the 2004 Renewal Survey, the pension group was less likely to have started new business ventures or expanded their operations in the last 5 years.

Chart B10

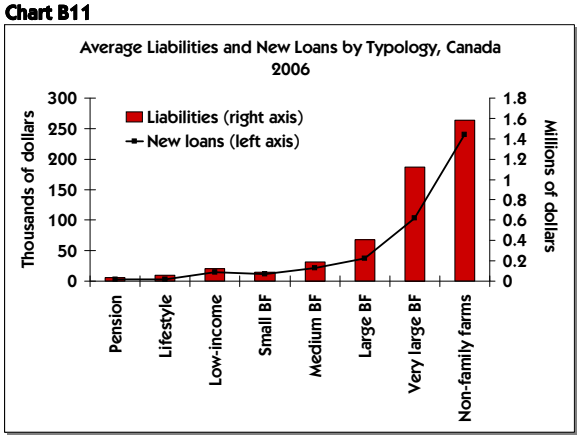


Source: Statistics Canada, Taxfiler Database.

Farms in the pension category hold the lowest debt levels and are least likely to make new investments.

The pension group is least likely to expand or invest in their operation. Both average total liabilities and new loans are the lowest of the typology groups.

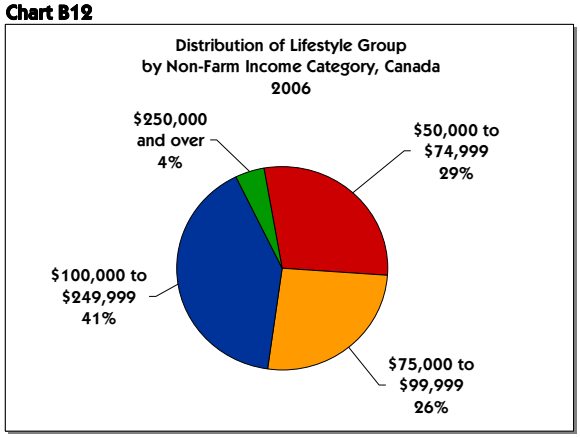
Chart B11



Source: Statistics Canada, Farm Financial Survey.

While lifestyle farms typically operate the farm at a loss, farm families in this group receive considerable income from non-farm wages and salaries

Chart B12

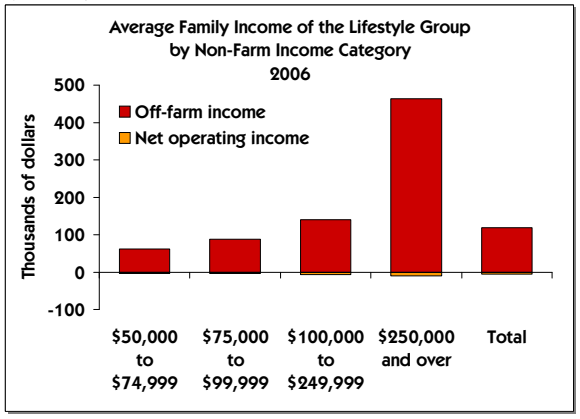


Source: Statistics Canada, Taxfiler Database.

Lifestyle farms are small farms operated by farmers who earn high non-farm wages and salaries.

In 2006, 71% of lifestyle farms earned greater than $75,000 in non-farm income with 45% earning non-farm income greater than $100,000.

Chart B13



Source: Statistics Canada, Taxfiler Database.

Lifestyle farms are typically operated at a loss.

Off-farm income greatly compensates for this loss.

For the lifestyle group, average farm losses increase slightly with increasing non-farm income.

- In 2006, lifestyle families with non-farm income of $250,000 and over, reported the largest average loss in net operating income of -$9,597. The average loss climbs to -$11,144, once CCA is deducted.

The majority of families in this group would not claim farm income as their chief source of income and as a result would follow the tax rules regarding restricted farm losses. For those with a reasonable expectation of a profit, the maximum deductible for farming loss is restricted to $2,500 plus 50% of the next $12,500 to a maximum of $8,750.

Low-income farms receive little income from either farm or non-farm sources

Over half of the low-income farms earned less than $30,000 in total family income in 2006.

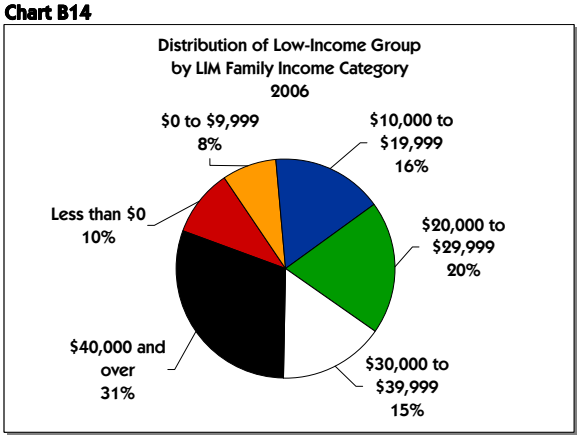
In 2006, one-in-ten farm families in the low-income group reported negative total family income.

Another 44% of families reported total family income below $30,000.

Farm families in the low income category are small to medium-sized farms with income that fell below Statistics Canada's Low Income Measure (LIM) which varies depending on the size of the farm family.

NOTE: Calculation of family income for LIM is equal to net income from farming reported for tax purposes plus non-farm sources of income. Net income from farming is after depreciation and adjustments for income and expenses.

Chart B14



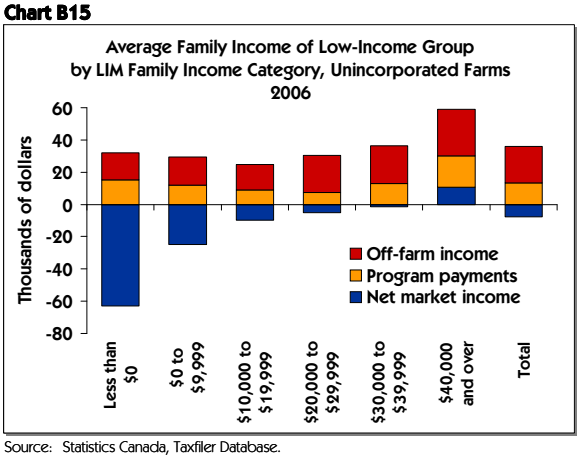
Source: Statistics Canada, Taxfiler Database.

On average, program payments make up for the loss in net market income reported by the low-income group.

In 2006, average family income of the low-income group was $28,100, with market losses of $7,800, program payments of $13,300 and non-farm family income of $22,600.

Close to one-in-ten families (10%) in the low-income group reported negative total family income, with average market losses of $63,000. Program payments were not sufficient to cover market losses resulting in negative net operating income and negative family income.

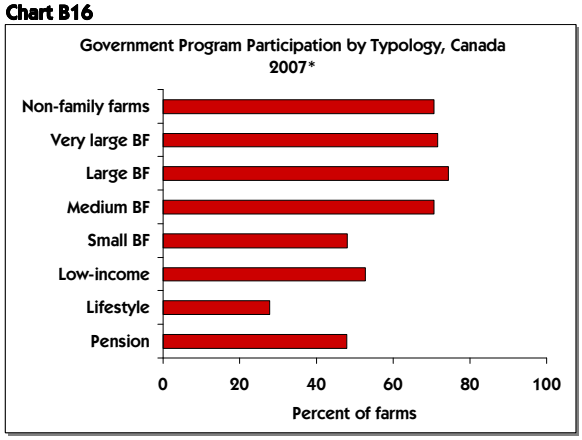
Chart B15



Source: Statistics Canada, Taxfiler Database.

Government program participation also varies by business intentions

Chart B16



Source: Statistics Canada, Farm Financial Survey.

Note: * Farms received revenue from at least one of the following programs: ASRA, CFFOP, APP, CAIS, GOPP and/or Crop Insurance.

The lifestyle group is least likely to participate in government programs.

In 2007, 56% of farms received revenue from at least one of the main government programs for agriculture.

Business-focused farms with $100,000 or more in gross revenues and non-family farms are more likely to participate in agricultural programs.

SECTION C

Farm Income and Income Variability

When analyzing farm income, one cannot solely examine the health of the agricultural sector using the typical aggregate farm income estimates reported over time. Because of the diverse nature of farms in Canada, a more rigorous analysis is required to understand the sector at the disaggregated level.

The purpose of this section is to illustrate the diversity within the agricultural sector and the importance of using statistics that help portray this diversity. Statistic Canada's Taxfiler database is used for the majority of the analysis on net operating income, and the Farm Financial Survey (FFS) and Canadian Agricultural Income Stabilization (CAIS) databases were used for the analysis of low cost and high cost producers. In this section, as in the previous one, income is reported in constant dollars.

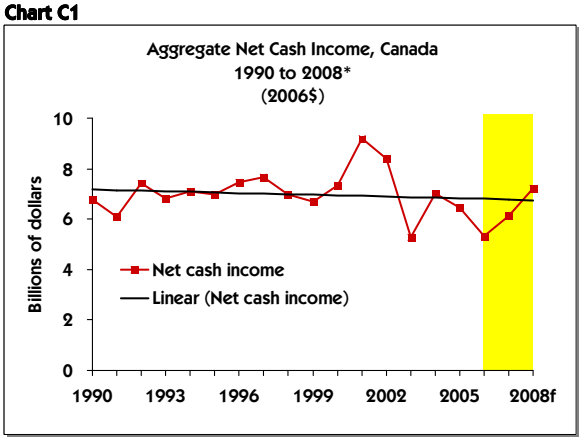
Aggregate measures of farm income do not necessarily reflect what is happening at the farm level

Agriculture's aggregate net cash income has fluctuated due to year-over-year changes in farm business returns but the overall trend is relatively flat.

Net cash income has become more variable in recent years.

The sharp decline in income between 2002 and 2003 was mainly due to drought in the Prairie provinces and the impacts of BSE. Rising grain and oilseed prices in 2007 and 2008 led to the most recent increase in aggregate net cash income.

Chart C1



Source: Statistics Canada, Value-Added Account.

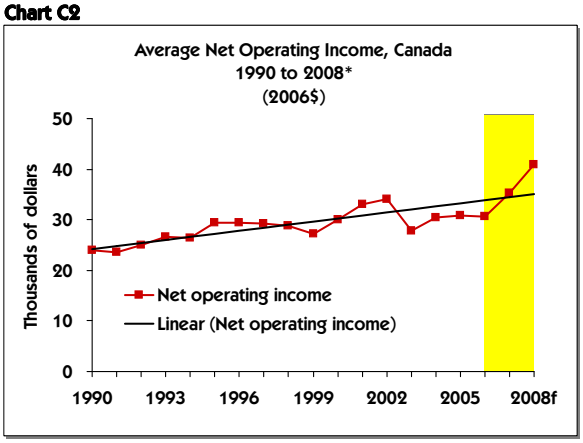
Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

But on a per-farm basis, net operating income has been increasing over time in real terms.

Between 1990 and 2006, average net operating rose 27% to $30,655. It is forecast to continue rising in both 2007 and 2008.

While real aggregate income was relatively flat over time, at the farm level, real farm income is on the rise due to a decline in farm numbers over which aggregate farm income is spread.

Chart C2

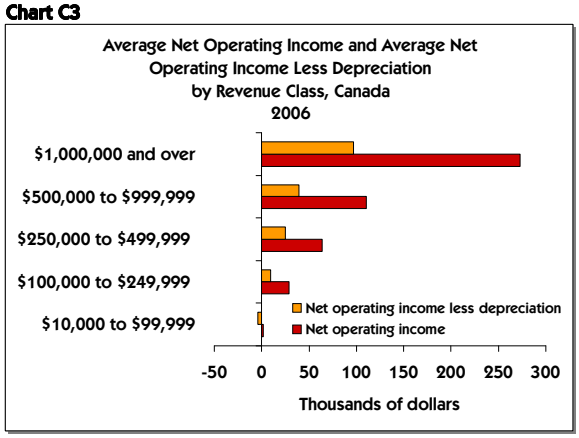


Source: Statistics Canada, Taxfiler Database.

Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

A more disaggregated approach allows us to see the diversity of farm income by size of operation and typology

Chart C3



Source: Statistics Canada, Taxfiler Data Series.

Note: Net depreciation is measured as CCA less CCA Recaptured.

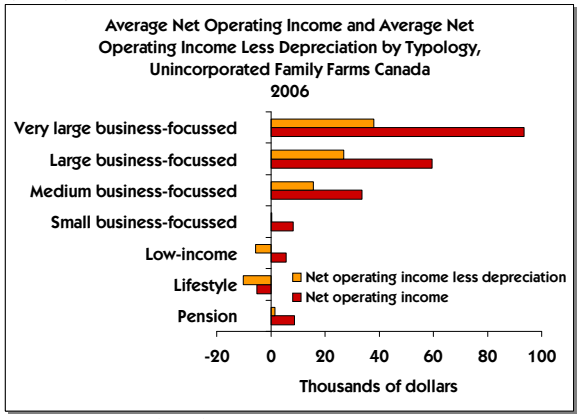
Larger farms tend to report much higher farm income, both before and after adjusting for depreciation.

In 2005, average net operating income for small farms with gross revenue of $10,000 to $99,999 was $1,925.

By contrast, average net operating income for farms with $1,000,000 or more in gross revenue, was $273,000. Average net operating income declines to $96,900 for this revenue class when depreciation has been deducted.

NOTE: Depreciation expense is the loss in value of an asset due to wear and tear over time and is recorded over a period of time to spread the initial purchase price of the asset over its useful life. Unlike other expenses, depreciation expense is a non-cash transaction which means that no money is actually paid at the time the expense is incurred.

Chart C4



Source: Statistics Canada, Taxfiler Data Series.

Note: Taxfiler data used for farm typology categories includes only unincorporated farms.

Among smaller farms, both the low-income and lifestyle farms report negative farm income when depreciation is taken into account.

Lifestyle farms reported a loss of -$10,100 with depreciation deducted and low income farms reported a loss of -$5,600.

Very large business-focused farms, net operating income decreased from $93,500 to $37,900, a 59% decline when depreciation was deducted.

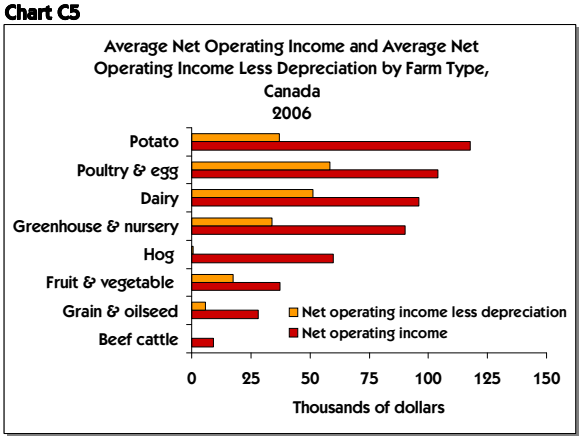
Farm income also varies by farm type

In 2006, potato farms and poultry and egg farms reported the highest average net operating incomes.

Poultry and egg farms, potato farms tend to report higher incomes than other farm types due in part to a higher concentration of large and very large farms in these product specialties.

Beef cattle operations, grain and oilseed farms and fruit and vegetable farms tend to report the lowest incomes. This is due to the high concentration of small farms within these revenue classes.

Chart C5



Source: Statistics Canada, Taxfiler Data Series.

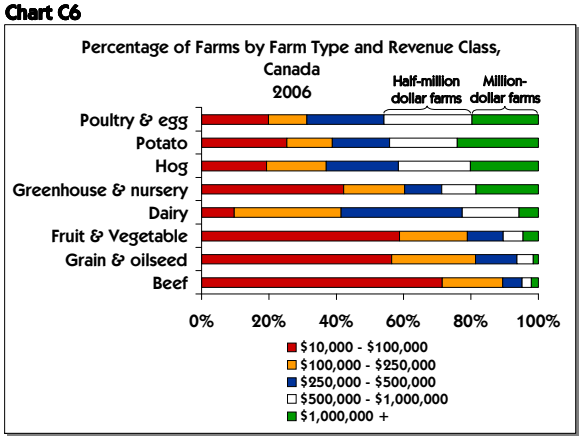
Poultry and egg, potato, and hog farms have the highest concentration of half-million and million-dollar farms.

In 2006, about 20% of potato farms, hog farms, poultry and egg farms, and greenhouse and nursery farms had gross farm revenues of $1,000,000 or more.

Beef, grain and oilseed farms, and fruit and vegetable farms have the largest concentration of small farms with less than $100,000 in gross revenues.

Dairy farms have the smallest concentration of small farms with gross revenues of less than $100,0000.

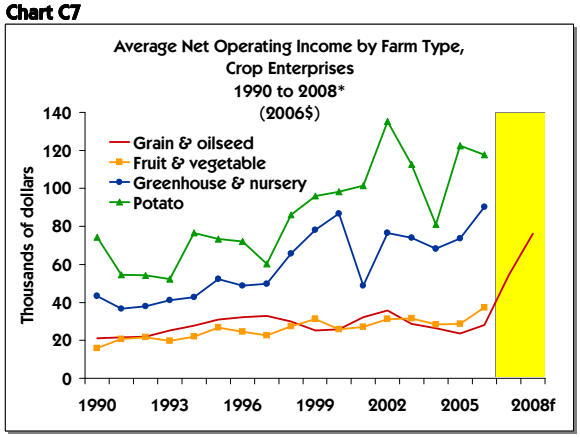
Chart C6



Source: Statistics Canada, Taxfiler Data Series.

Some farm types experience considerably more year-over-year variation in average farm income than others

Chart C7



Source: Statistics Canada, Taxfiler Data Series.

Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

There is a large variation in year-over-year real net operating income across farm types.

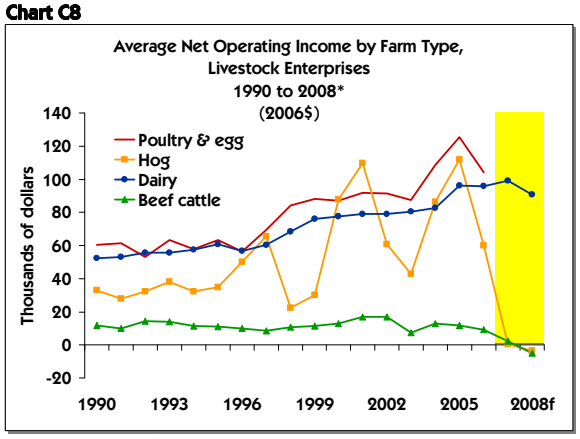
Average net operating incomes of potato farms, greenhouse and nursery farms and hog farms (shown in lower graph) are rising and are much more variable than other major enterprise types.

- This variability is due in part to the high and rising concentration of very large farms in these sectors.
- A 10% change in income by a very large farm with gross revenues greater than $500,000 has a much greater impact on the average dollar change in farm income relative to a 10% change in income by a small farm.

Grain and oilseed farms, and fruit and vegetable farms reported average net operating incomes below the Canadian average for all farms.

- There is a high concentration of small farms within these enterprise types.

Chart C8



Source: Statistics Canada, Taxfiler Data Series.

Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

The supply-managed sector has stable and rising net operating income.

Due to the high concentration of small beef cattle operations, average net operating income is the lowest of the farm types analyzed.

Hog farms experienced the greatest year-over-year fluctuation in average net operating income. The hog sector, which historically has operated under a four-year cycle experienced fluctuations in hog prices from a low of $59.20/cwt in 1998 to a high of $84.4/cwt in 2001.

Beef cattle operations tend to report the lowest average net operating incomes.

The supply-managed sector has stable and rising net operating income. However, with the rise in feed prices, net operating incomes are forecast to decline for livestock enterprises including dairy farms in 2008.

Some provinces also experience considerably more year-to-year variation in farm income than others

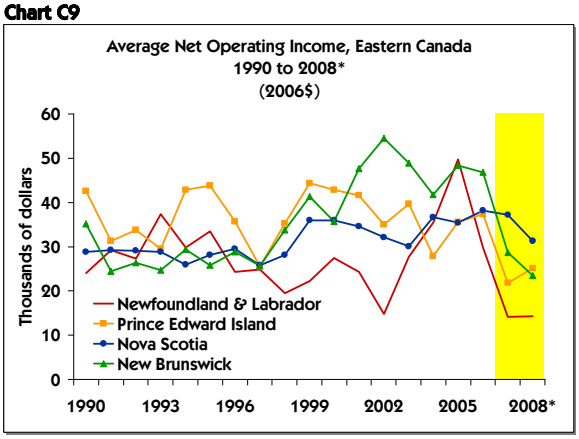
There is a large variation exists in year-over-year real net operating income across provinces in Eastern Canada.

Average net operating incomes for farms in New Brunswick and Nova Scotia are rising over time.

Average net operating income increased significantly for farms in Newfoundland and Labrador in 2005.

Recent income declines are due in part to higher feed and fuel costs. This region did not benefit from the higher grain and oilseed prices due to the limited percentage of farms specialized in these commodities.

Chart C9



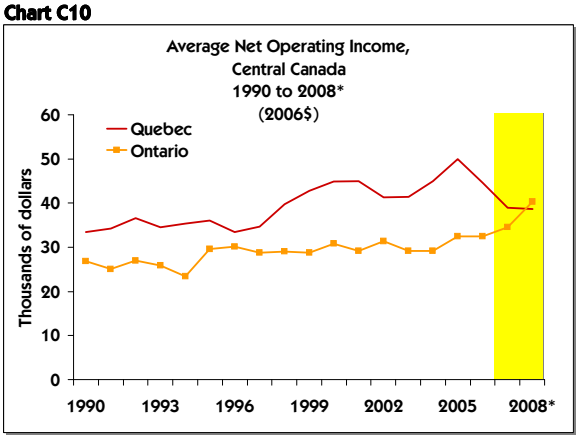
Source: Statistics Canada, Taxfiler Data Series.
Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

Average net operating incomes for farms in Central Canada is relatively stable over time.

In real terms, Ontario's average net operating income has been creeping up over time. Rising grain and oilseed prices have contributed to the increasing average net operating incomes for 2007 and 2008.

Over the same time period, Quebec farms had higher and rising net operating income. The prominence of supply management in Quebec has contributed to this trend. Recent difficulties in the hog sector have led to a decline in net operating income in 2007 and 2008.

Chart C10



Source: Statistics Canada, Taxfiler Data Series.
Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

Average net operating incomes for farms in Western Canada tend to be less variable than incomes in Eastern Canada.

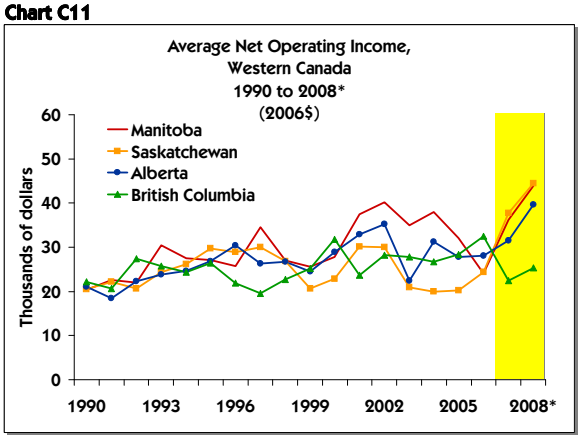
With the rising prices for grains and oilseeds in 2008, net operating incomes are forecast to increase in all three prairie provinces.

Manitoba is more variable due to the large proportion of hog farms which experience variable income.

Saskatchewan and Alberta are less variable due to the large number of grain and oilseed farms and beef cattle operations which tend to be less variable.

B.C. tends to run counter to Saskatchewan due to influence of beef cattle in B.C. When grain prices increase, B.C.'s net operating income drops due to increased feed inputs.

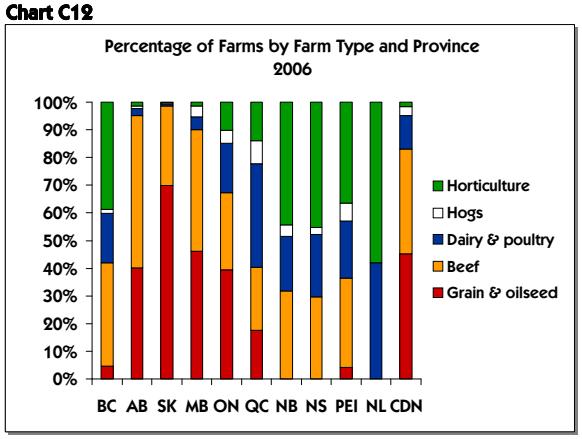
Chart C11



Source: Statistics Canada, Taxfiler Data Series.
Note: * 1990 to 2006 are in constant 2006$, and 2007, 2008 are based on AAFC forecasted estimates.

Regional variations in production of commodities influences income by province

Chart C12



Source: Statistics Canada, Taxfiler Data Series.

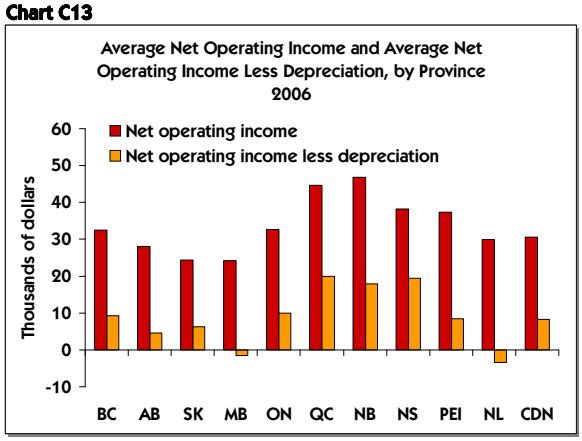
The distribution of farms by farm type is different in each province.

Grain and oilseed farms are concentrated in the Prairie provinces.

Horticulture operations which include fruit, vegetables, potatoes and greenhouse and nursery operations, are more concentrated in Eastern Canada and British Columbia.

Beef cattle farms have declined in each province since 2003 when the BSE crisis reduced beef cattle prices and revenues. Many farms still have beef cattle but they are no longer the dominant revenue source. Alberta and Manitoba have the highest concentrations of beef cattle operations.

Chart C13



Source: Statistics Canada, Taxfiler Data Series.

As a consequence, average net operating income varies by province due to the differences in the concentrations of farms by farm type.

In 2006, average net operating income was highest in New Brunswick and Quebec, at $46,900 and $44,600, respectively. With depreciation deducted, income was highest in Quebec and Nova Scotia.

Manitoba and Saskatchewan had the lowest average net operating incomes in 2006.

Even for farms of similar size and type, operating costs can be quite variable

Due to differences in cost structures, the operating expenses required to generate a dollar in gross revenue differ within each farm type.

Considerable spread in costs exists within each farm type.

The spread (or range) between low cost and high cost production, is greatest for beef cattle farms ($0.38). The spread is greatest for this group due to the diversity that exists within this farm type that includes cow-calf operations, backgrounders and feedlots as well as purebred operations.

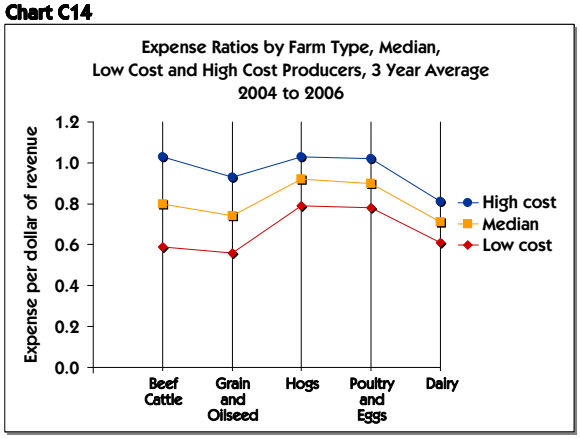
Dairy farms have the lowest spread between low cost and high cost operations at $0.20. where the cut-offs for the low cost and high cost producers are 0.61 and 0.81, respectively.

NOTE: Low cost producers refer to the 25% of farms with the lowest total expense ratios (total operating expense to gross revenue). It's also equivalent to the 25% of farms with the highest gross margins.

Total expense ratio = 1 – operating margin.

High cost producers refer to the 25% of farms with the highest total expense ratios.

Chart C14



Source: Farm Financial Survey, Internal Calculations AAFC.

Note: The low cost cut-off for this slide is equivalent to the 25th percentile and the high cost cut-off is equivalent to the 75th percentile.

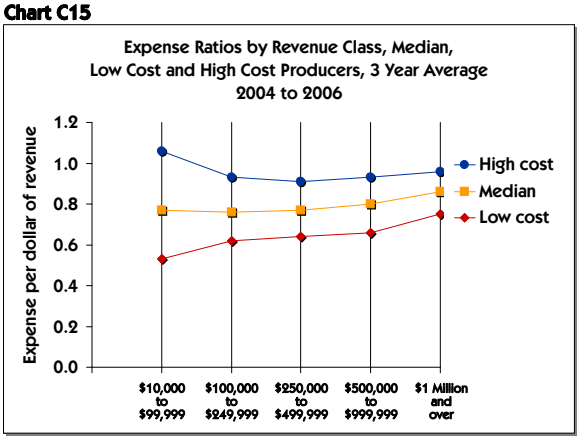
The larger the farm, the lower the variability in expenses required to generate gross revenue.

The spread is largest for small farms, where the cut-offs for the low cost and high cost producers are 0.56 and 1.06, respectively. A large share of farms in this group are not business-focused and tend to operate their farms at a loss.

For farms with revenues greater than $1,000,000, the cut-off of the low cost quartile (25th percentile) is $0.75 and for the high cost quartile $0.96, a spread of $0.21.

These differences across revenue classes are likely due to more homogeneous business practices among the larger farms in contrast to the more diverse business strategies found among smaller farms. And as seen in Section A, a large percentage of small farms fall into the pension, lifestyle and low income groups.

Chart C15

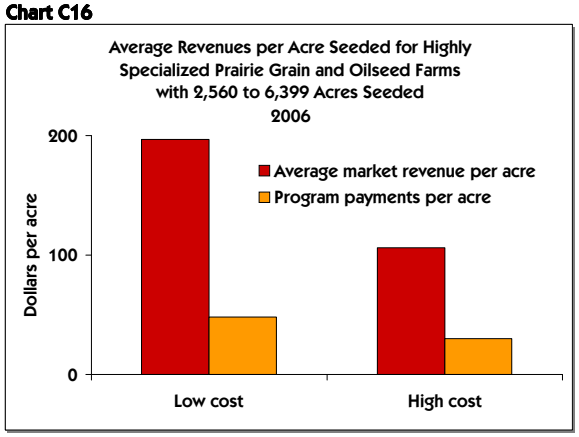


Source: Farm Financial Survey, Internal Calculations AAFC.

Note: The low cost cut-off for this slide is equivalent to the 25th percentile and the high cost cut-off is equivalent to the 75th percentile.

The most cost-efficient farms maximize revenues while at the same time minimizing costs...

Chart C16



Source: Statistics Canada, Farm Financial Survey, AAFC Internal Calculations.

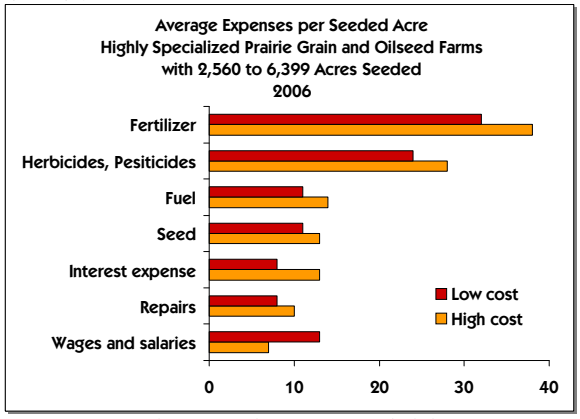
Low-cost enterprises generate higher revenues.

Low cost grain and oilseed farms reported average gross revenues of $245 per acre compared to $136 per acre for high cost producers.

The vast majority of grain and oilseed farms with seeded acres of 2,560 to 6,399 acres (4 to 9 sections) fall in the $250,000 and over revenue class.

NOTE: Farms of similar size are selected based on physical units rather than revenue class to eliminate problems that arise when farms experience revenue short falls such as price declines or crop failures. Revenue declines can move farms to lower revenue categories.

Chart C17



Source: Statistics Canada, Farm Financial Survey, AAFC Internal Calculations.

Low-cost enterprises have a tight control over costs as well.

With the exception of labor costs, low cost enterprises tend to report lower expenses for individual expense items.

Wages and salaries expenses for low cost enterprises is close to double that of high cost enterprises. The payment of family farm wages and salaries is one method of sharing the farm profits between family members.

...regardless of farm type, farm size and region

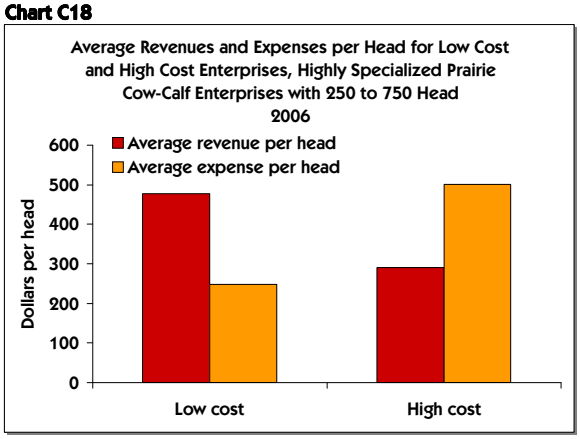
Low-cost enterprises are more profitable and generate higher revenues at lower cost.

On a per unit basis, total revenue generated by low-cost cow-calf enterprises was 65% higher than that generated by high-cost farms.

At the same time, total expenses reported by low-cost enterprises were half that reported by high-cost enterprises.

Cow-calf operations which sold their calves in the fall and have between 250 to 750 head fall roughly into the $100,000 to $249,999 revenue class. A small percentage of farms fall in revenue classes above and below this category.

Chart C18



Source: Statistics Canada, Farm Financial Survey, AAFC Internal Calculations.
Note: Selected cow-calf enterprises that sold calves in fall.

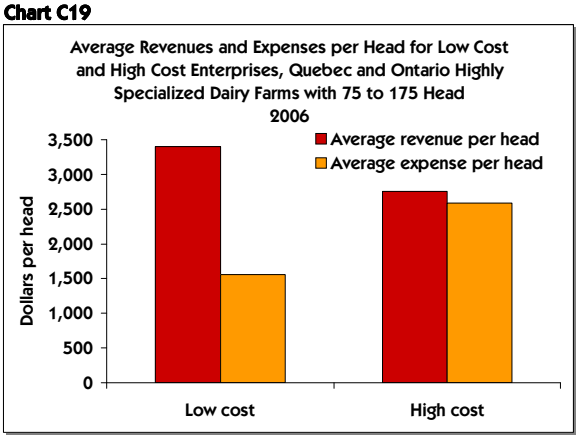
Even where market prices are regulated, low-cost enterprises generate higher revenue at lower cost.

On a per unit basis, total revenue generated by low-cost dairy enterprises was over 20% higher than that generated by high-cost farms.

At the same time, total expenses reported by low-cost enterprises was 60% of that reported by high-cost enterprises.

Dairy operations with 75 to 175 head fall roughly into the $250,000 to $499,999 revenue class. A small percentage of farms fall in the revenue classes above and below this category.

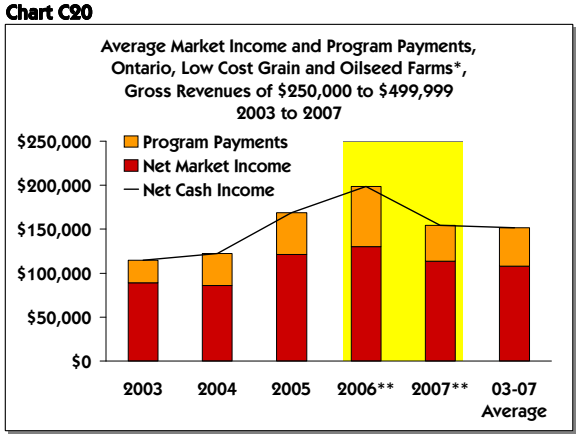
Chart C19



Source: Statistics Canada, Farm Financial Survey, AAFC Internal Calculations.

Even among farms of the same type and revenue class, some farms lose money year after year while others are profitable

Chart C20



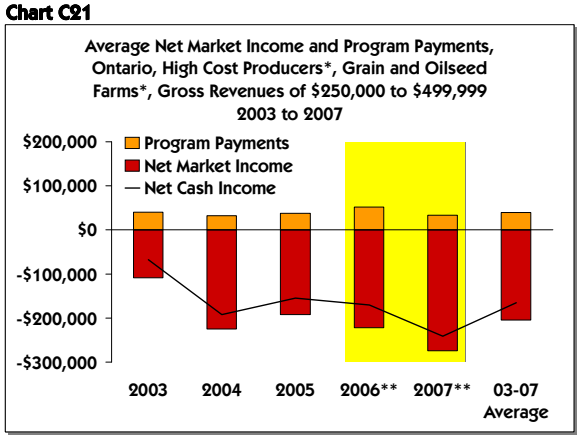
Source: AAFC internal estimates, CADMS model.

Note: * Low cost producers refer to the 20% of farms with the lowest total expense to total revenue ratio.
**Forecast (highlighted yellow).

The low cost enterprises were profitable even while market conditions varied substantially.

Between 2003 and 2007, low cost farm, had an average net income of $151,800 for the 5 year period, which consisted of $108,100 in average net market income and $43,800 in program payments.

Chart C21



Source: AAFC internal estimates, CADMS model.

Note: * High cost producers refer to the 20% of farms with the highest total expense to total revenue ratio.
**Forecast (highlighted yellow).

The high cost enterprises reported significant losses from the market that were offset slightly by program payments.

High cost farms had an average net market loss of $204,400, average program payments of $39,100, and negative average net income of -$165,300 for the 5 year period.

SECTION D

Trends in Farm Assets, Liabilities and Net Worth

This section examines assets, liabilities and net worth of farms in Canada highlighting the differences between farms by size of farm and farm type. The following topics will be covered:

- total assets and net worth
- liabilities
- overall financial health of industry

Section D presents assets on a market value basis. Balance sheet data on farm assets based on market value is relatively easy to collect from farm business owners since it is information they supply to banks and other lending institutions when applying for business loans. The primary data source used for this section is Statistic Canada's Farm Financial Survey.

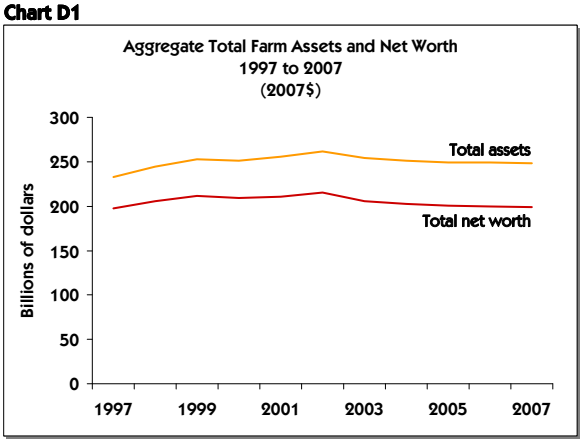
Farm assets and net worth are increasing on a per farm basis

In the past ten years, the real values of aggregate total farm assets and net worth in Canada have remained relatively constant.

However, the trend in aggregate performance tends to mask what is happening at the farm gate.

NOTE: Farm assets in this section are reported at fair market value as opposed to book value for both aggregate and per farm estimates.

Chart D1



Source: Statistics Canada, Table 002-0020, Balance Sheet of the Agricultural Sector, various years.

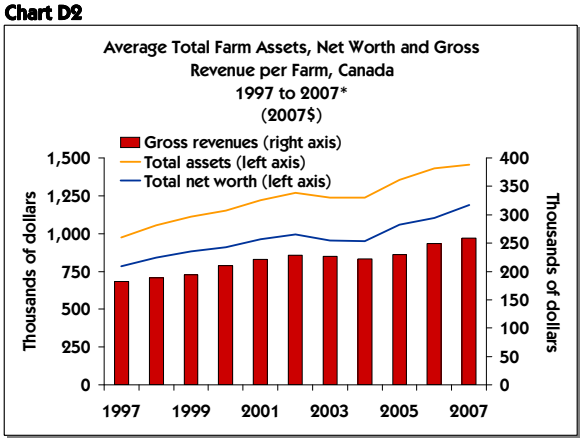
However, on a per farm basis, farm assets and net worth are increasing over time, which reflects, the trend to larger and fewer farms.

Total farm assets and net worth peaked in 2002, one year prior to the first report of BSE in Canada.

In the past 10 years in Canada, average farm assets increased 38% to $1,455,000 per farm in 2007. Similarly, average net worth increased 41% to $1,189,000 in 2007.

Low grain prices and BSE in 2003 depressed inventory valuations and gross revenues in 2003 and 2004 but started to recover in 2005 with average gross revenues reaching $258,900 in 2007.

Chart D2

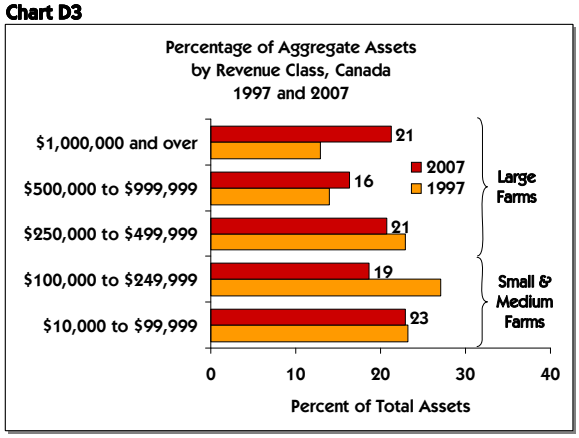


Source: Statistics Canada, Farm Financial Survey and Taxfiler Database, various years.

Note: * Farm assets and net worth are estimated for 1998 and 2000. Gross revenue is a preliminary estimate for 2007.

The asset base for larger farms has increased significantly over time

Chart D3



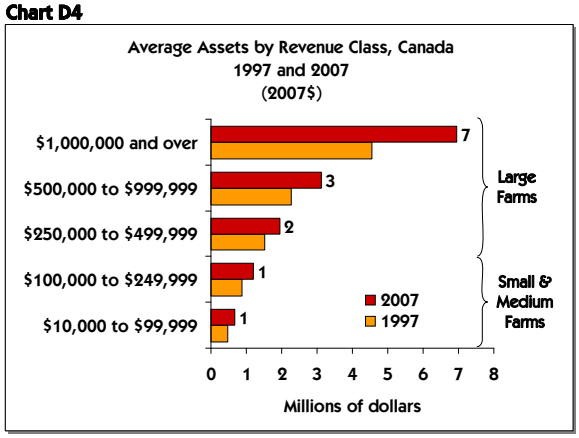
Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Smaller farms are being consolidated as others increase in size.

Aggregate total assets owned by smaller farms are declining while that of larger farms are increasing. As the number of small and medium sized farms (gross sales of less than $250,000) declined, so has their aggregate total assets.

Similarly, as the number of very large farms (gross revenues of more than $500,000) increased, so has their aggregate total assets.

Chart D4



Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

On a per farm basis, farm assets are increasing in all revenue classes, however the increase is much more significant for larger farms.

Farms with over $1,000,000 in gross revenues saw total assets increase by over 50% in real terms between 1997 and 2007.

Part of the increase is due to the appreciation in farm assets, such as farmland and quota. Given the current rise in grain and oilseed prices, land values are expected to appreciate in value in 2008 across all revenue classes.

While grain and beef cattle operations account for the majority of farm assets, average assets are increasing rapidly for dairy, poultry and potato farms

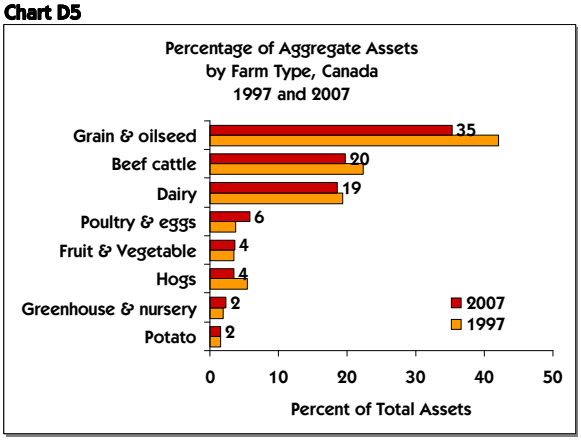
The majority of farm assets are held by farms specialized in grains and oilseeds, beef cattle or dairy products.

Due to the large number of grain and oilseed farms and beef cattle farms in Canada, aggregate assets are quite high for these two farm types. In 2007, grain and oilseed farms held 35% of total assets, beef cattle operations held 20% of assets.

In the last 10 years, asset values rose for all farm types with the exception of hog farms.

- Aggregate total assets declined 6% for hog farms, due in part to the relatively poor returns to hog production.

Chart D5



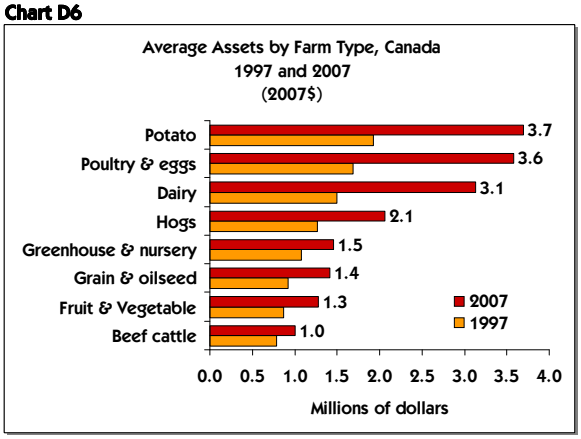
Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Expansion in the poultry, potato, dairy and hog sectors led to larger increases in total assets for these farm types.

Between 1997 and 2007, total assets per farm more than doubled for dairy farms and poultry and egg farms. Total assets for potato farms also rose substantially, increasing 91%.

Average total assets rose to a lesser extent for beef cattle operations, due in part to the large number of very small operations with less than $100,000 in gross revenues.

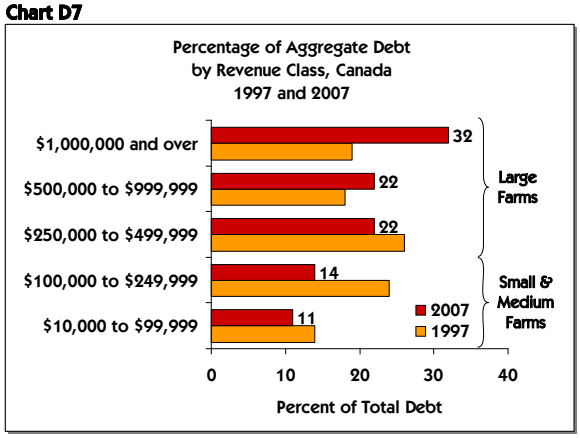
Chart D6



Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Farm debt is increasing rapidly for larger farms as they adopt new technologies and expand their operations

Chart D7



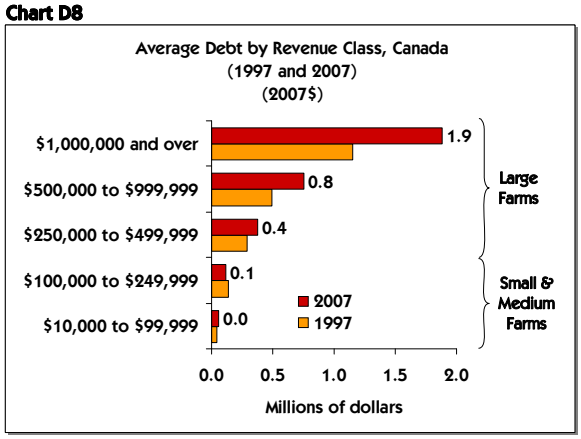
Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Large farms hold approximately three-quarters of total farm debt.

In 2007, large farms held 76% of total farm debt compared to 62% in 1997.

Million dollar farms now hold 32% of total farm debt ($13.7 billion) and farms with $500,000 to $999,999 in gross revenue hold 22% of total farm debt ($9.4 billion).

Chart D8

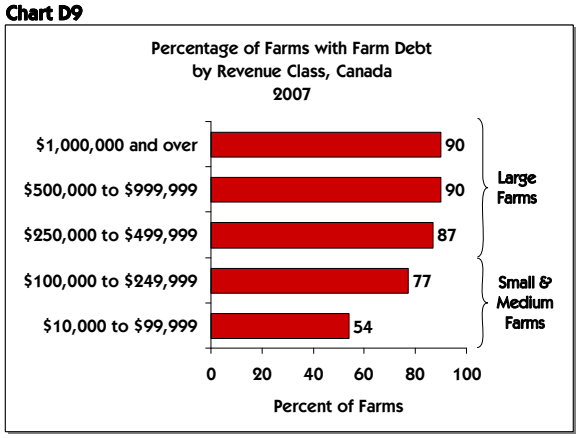


Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

The average debt per farm is increasing for all revenue classes, and more significantly for the largest farms as they take on debt to invest and expand their farm operations.

Between 1997 and 2007, average farm debt increased 63% for farms with $1,000,000 and over in gross revenues while debt for farms with gross revenues of $500,00 to $999,999 increased 54%.

Chart D9



Source: Statistics Canada, Farm Financial Survey, 2007.

Larger farms are more likely to have farm debt.

In 2007, farm debt was held by 68% of farms in Canada with gross revenues of $10,000 and over.

A greater share of large farms, with $250,000 or more in gross revenues, carry farm debt compared to smaller farms.

Only 54% of small farms with $10,000 to $99,999 in gross revenues carry farm debt.

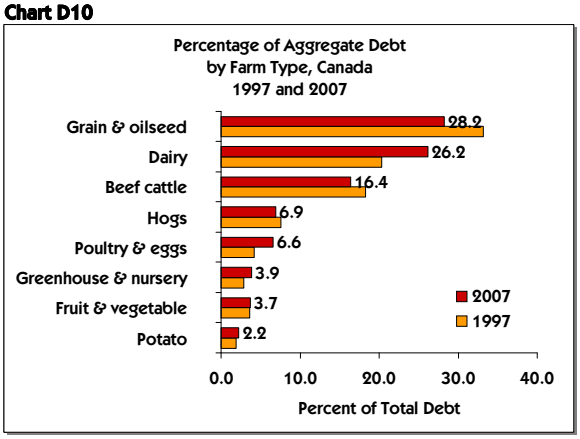
Farm debt has also increased for all farm types, but in particular for dairy, hog, poultry and potato farms

The majority of farm debt is held by grain and oilseed farms and beef cattle operations.

While aggregate debt increased for each of the major farm types between 1997 and 2007, the portion of total debt held by grain and oilseed farms, beef cattle farms and hog farms declined. Farm debt is growing to a much greater extent in other sectors that are expanding.

Sectors undergoing considerable expansion, in particular, poultry and egg farms, greenhouse and nursery farms, and dairy farms had the largest increases in aggregate farm debt.

Chart D10



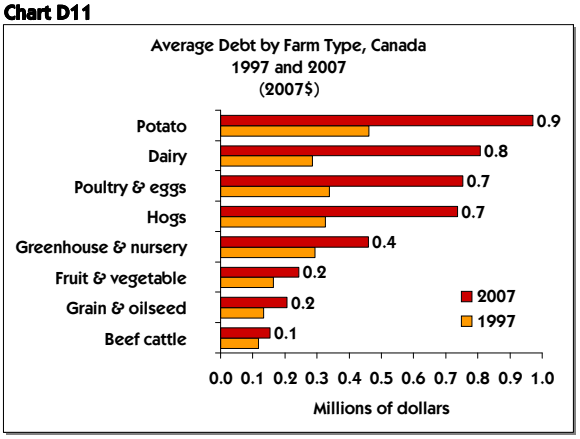
Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

On a per farm basis, farm debt increased most significantly for dairy, hog, poultry and potato farms.

Average debt more than doubled for dairy, hog, poultry and egg, and potato farms which are generally larger farms, on average.

In 2007, potato farms reported the highest average farm debt at $973,000 while beef cattle reported the lowest at $153,000.

Chart D11



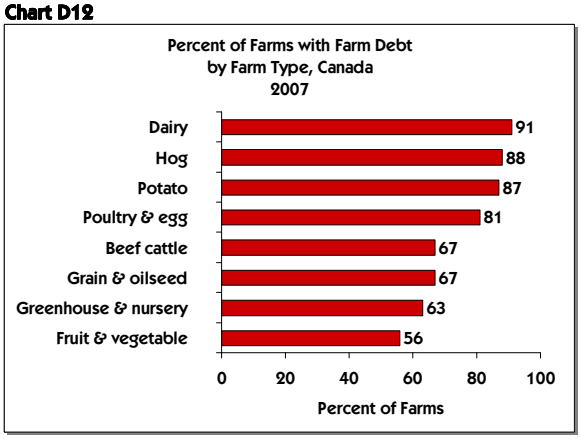
Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Dairy, hog and potato farms are more likely to have farm debt.

In 2007, farm debt was held by 91% of dairy farms, 88% of hog farms and 87% of potato farms.

Fruit and vegetable farms are least likely to have farm debt at 56% of farms.

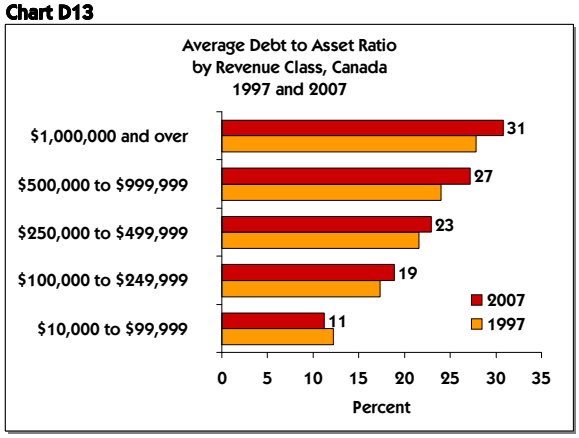
Chart D12



Source: Statistics Canada, Farm Financial Survey, 2007.

Debt relative to assets is higher for larger farms and some farm sectors

Chart D13

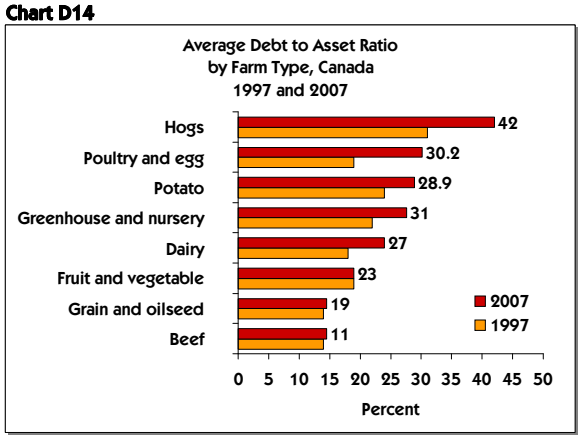


Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Larger farms have higher debt-to-asset ratios.

Million-dollar farms with gross revenue of $1,000,000 and over had a debt-to-asset ratio of 31% in 2007, up 3 percentage points from 1997.

Chart D14



Source: Statistics Canada, Farm Financial Survey, 1997 and 2007.

Expanding sectors have on average higher debt-to-asset ratios.

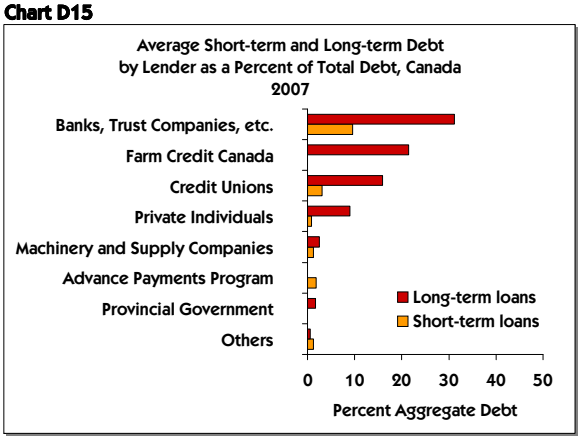
The hog farms as well as the poultry and egg farms reported the highest debt-to-asset ratios in 2007, at 42% and 30%, respectively. They also reported the largest percentage increases, at 11 percentage points each.

Farms owe the majority of debt to banks, Farm Credit Canada and Credit Unions

Banks are the main farm lender.

In 2007, banks held 41% of farm debt of which three-quarters was long-term, Farm Credit Canada held 21% of farm debt and Credit Unions held 19% of farm debt.

Chart D15



Source: Statistics Canada, Farm Financial Survey, 2007.

The number of FCC loans in arrears has declined over the past 5 years.

For the majority of farm types, loan arrears declined.

The only exception was the hog sector, which saw the number of hog farms in loan arrears peak in 2007.

Chart D16

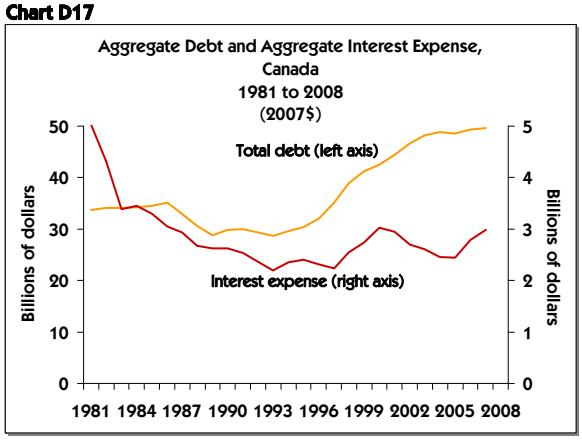
Number of Loans in Arrears,
Farm Credit Canada
2004 to 2008

COMMODITY	2004	2005	2006	2007	2008
Grain & oilseed farms	1,938	1,698	1,451	1,126	858
Beef cattle ranches	856	550	498	490	482
Dairy farms	140	110	109	91	73
Hogs	121	97	125	173	137
Poultry & egg farms	33	24	18	23	22
Other farm types	269	174	134	131	132
Value-added enterprises	226	201	223	195	203
Other income sources	185	169	231	302	359
TOTAL	3,770	3,023	2,789	2,532	2,267

Source: Statistics Canada.

Although farm debt is increasing, the cost of carrying higher debt has not risen significantly because of lower interest rates

Chart D17

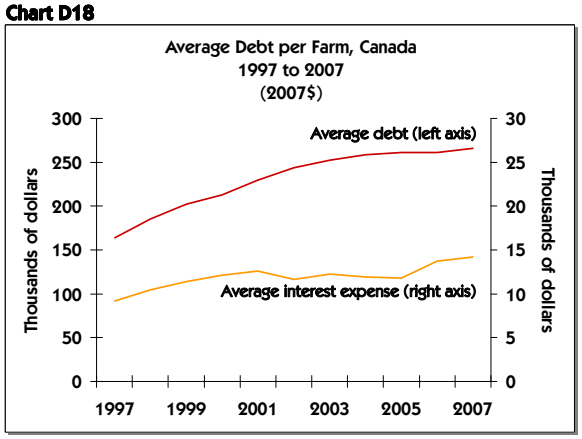


Source: Statistics Canada, Agricultural Economic Statistics, various years.

The downward trend in interest rates has allowed producers to take on more debt without increasing interest expenses.

Total interest expenses have remained below the high of 1981. At the same time, farm debt has increased in the sector and now totals $49.7 billion (in 2007).

Chart D18

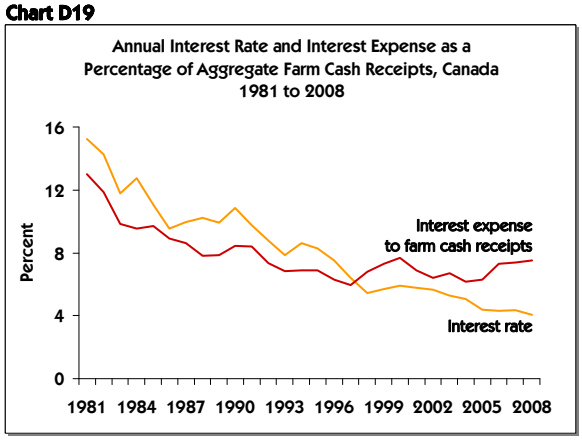


Source: Statistics Canada, Farm Financial Survey and Taxfiler Database various years.

Similarly, on a per farm basis, farmers are taking advantage of the lower interest rates and expanding their farm businesses at relatively low cost.

Average interest expense per farm has remained relatively flat.

Chart D19



Source: Statistics Canada, Money market and other interest rates, Statistics Canada, Agriculture Economic Statistics and AAFC forecast estimate for 2008.

Producers can service more debt with the same income.

Interest expenses expressed as a percentage of farm revenue are one measure of the farm's ability to service debt.

In Canada, interest expenses were 7 cents per dollar of gross revenue in 2007 compared to 15 cents in 1981.

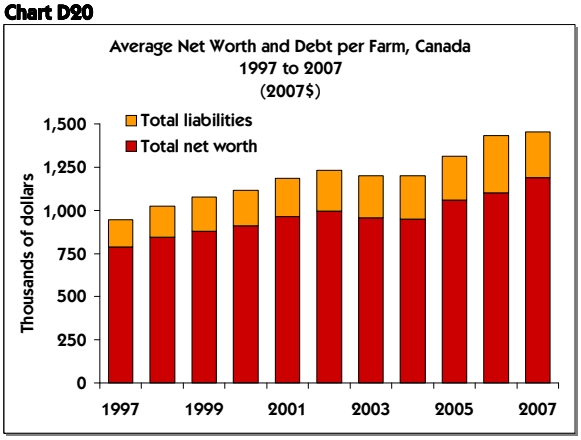
- Dairy farms reported the highest interest expense at 11 cents per dollar of gross revenue (based on 2007 preliminary tax data).
- Greenhouse and nursery farms and vegetable farms reported the lowest interest expense at 3 cents per dollar of gross revenue.

And despite increasing debt, net worth is also increasing

Average farm debt and average net worth are rising as farms become larger over time.

In the last 10 years, average farm net worth increased 48% to $1,189,000 while average farm liabilities increased 59% to $266,000.

Chart D20



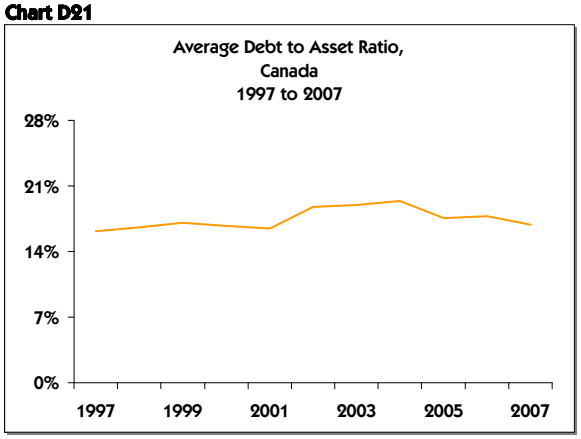
Source: Statistics Canada, Farm Financial Survey, various years.

Given that farm debt is small relative to total assets, the debt to asset ratio has only increased 2 percentage points over the past 10 years.

Between 1997 and 2007, the debt-to-asset ratio rose three-quarters of a percentage point and now sits at 16.9% for all farms in Canada. The relatively low debt-to-asset ratio shows that the sector still has a large amount of equity.

In general, the higher the debt level, the more leveraged the business. The more leveraged the business, the greater the inherent risk of financial failure because of the greater difficulty in refinancing losses.

Chart D21



Source: Statistics Canada, Farm Financial Survey, various years.

The vast majority of farms are in good financial shape

Chart D22

Percentage of Farms with Gross Revenues of $250,000 and Over by Equity Class and Farm Cash Flow Class 2007

Cash Flow Categories	EQUITY CLASS			
	Less than 50%	50% to 75%	More than 75%	All Farms
Less than $0	4.7%	6.1%	6.0%	16.8%
$0 to $20,000	1.0%	1.9%	3.5%	6.4%
Greater than $20,000	7.8%	19.9%	49.2%	76.9%
All Households	13.5%	27.9%	58.6%	100%

Source: Statistics Canada, Farm Financial Survey, 2007 and AAFC internal calculations.
Legend: Strong financial position (dark green); moderate financial position (light green); tight financial position (yellow).

The majority of Canadian farms are in a strong financial position.

The farm's financial position is determined by a combination of farm cash flow and equity levels.

Among Canadian farms:

- 80% of Canadian farms are classified as in a strong financial position (dark green). They can adequately service their debt and cover their business costs.
- 9% of farms are classified as in a moderate financial position (light green).
- 11% of farms are classified as being in a tight financial position (yellow) with inadequate cash flow and high debt.

NOTE: Debt can be an important factor in farm investment, expansion and transfer decisions between generations. Debt becomes a problem when it is excessive and not supported by adequate income.

Farm cash flow is a measure of the ability of the farm family to cover business expenses and to provide for depreciation and future growth. As farm cash flow increases, so does the financial security of the farm business.

Chart D23

Percentage of Grain and Oilseed Farms with Gross Revenues of $250,000 and Over by Equity Class and Farm Cash Flow Class 2007

Cash Flow Categories	EQUITY CLASS			
	Less than 50%	50% to 75%	More than 75%	All Farms
Less than $0	1.5%	4.6%	6.6%	12.7%
$0 to $20,000	1.1%	1.6%	3.8%	6.5%
Greater than $20,000	5.2%	18.4%	57.1%	80.7%
All Households	7.8%	24.7%	67.5%	100%

Source: Statistics Canada, Farm Financial Survey, 2007 and AAFC internal calculations.
Legend: Strong financial position (dark green); moderate financial position (light green); tight financial position (yellow).

A similar trend is observed in the grain and oilseed sector.

With improving grain prices, more than four fifths of grain and oilseed farms were in a good financial shape at the end of 2007.

- 85% of Canadian farms are classified as in a strong financial position (dark green). They can service their debt and cover their business costs.
- 9% of farms are classified as in a moderate financial position (light green).
- 6% of farms are classified as in a tight financial position (yellow).

NOTE: Farm cash flow is calculated as net operating income plus farm wages and salaries to family members less imputed principal payments.

Some farms, however, are in a tighter financial position

Beef cattle operation tend to have lower cash flow and equity levels.

Close to two-third of beef cattle farms were in good financial shape at the end of 2007.

- 646% of beef cattle operations are classified in a strong financial position (dark green). They can service their debt and cover their business costs.
- 15% are classified as in a moderate financial position (light green).
- 22% are classified as in a tight financial position with inadequate cash flow and high debt (yellow).

Chart D24

Percentage of Beef Cattle Operations with Gross Revenues of $250,000 and Over by Equity Class and Farm Cash Flow Class
2007

	EQUITY CLASS			
Cash Flow Categories	Less than 50%	50% to 75%	More than 75%	All Farms
Less than $0	10.0%	11.8%	11.6%	33.3%
$0 to $20,000	1.1%	1.8%	6.2%	9.1%
Greater than $20,000	4.3%	13.9%	39.4%	57.6%
All Households	15.4%	27.4%	57.1%	100%

Source: Statistics Canada, Farm Financial Survey, 2007 and AAFC internal calculations.
Legend: Strong financial position (dark green); moderate financial position (light green); tight financial position (yellow).

In the hog sector, more farms are in a tight financial position.

In 2007, half of hog farms were in good financial shape.

- 52% of hog operations are classified as in a strong financial position (dark green). They can service their debt and cover their business costs.
- 12% are classified as in a moderate financial position (light green).
- 36% are classified as in a tight financial position with inadequate cash flow and high debt (yellow).

Chart D25

Percentage of Hog Farms with Gross Revenues of $250,000 and Over by Equity Class and Farm Cash Flow Class
2007

	EQUITY CLASS			
Cash Flow Categories	Less than 50%	50% to 75%	More than 75%	All Farms
Less than $0	17.8%	18.2%	7.1%	43.1%
$0 to $20,000	3.6%	1.3%	1.9%	6.8%
Greater than $20,000	16.4%	17.1%	16.6%	50.1%
All Households	37.8%	36.6%	25.6%	100%

Source: Statistics Canada, Farm Financial Survey, 2007 and AAFC internal calculations.
Legend: Strong financial position (dark green); moderate financial position (light green); tight financial position (yellow).

SECTION E

Farm Financial Performance Ratios

This section examines the overall performance of incorporated farms in Canada. Under the Income Tax Act, businesses which are incorporated are required to file both an income statement and a balance sheet for tax purposes. Assets on the balance sheet are required to be valued on the basis of their historical cost. The unincorporated sector is not required to file a balance sheet statement. Consequently, many financial ratios cannot be calculated for unincorporated farms using taxfiler data.

The primary data source used for this section is Statistic Canada's Corporate Farm Taxfiler Database. For this analysis only incorporated farms with $50,000 or more in gross revenues and $50,000 or more in assets are analyzed. Statistic's Canada has collected corporate returns from the Canada Revenue Agency each year since 1997. In 2006, Statistics Canada had data on 43,214 incorporated farms of which 27,973 had revenues of $50,000 or more.

The financial performance ratios provided in this section are used by industry for a number of different purposes including: benchmark analysis with comparisons between farm enterprises, long-term health of industry reporting, loan approvals, and policy and program development.

The following performance measures are covered:

Profitability ratios measure the extent to which a business is able to generate profit from the utilization of the business resources. Two common measures of business profitability are the return on assets and the return on equity.

Financial efficiency ratios measure the ability of a business to control costs in relation to revenues. One ratio used to analyze financial efficiency is the profit margin ratio.

Debt management ratios measure the ability of a business to meet its long-term obligations on time. Two ratios used to analyze solvency are the equity ratio and the debt-equity ratio.

Asset management ratios measure how effectively the business is managing its assets. The capital turnover ratio is used to analyze asset management.

Liquidity ratios measure both the ability of a business to convert its assets into cash or to obtain cash to meet current liabilities and other financial commitments. Two ratios are used to examine liquidity are the current ratio and the debt structure ratio.

While profitability measures such as return on assets are relatively stable for all farms combined, it varies by farm type

Rates of return on assets for incorporated farms as a whole are relatively stable.

Return on assets averaged slightly less than 5% over the 10 year period.[8]

The level of risk, measured here as the variance in the rate of return to assets over time, is relatively low, at 0.30.

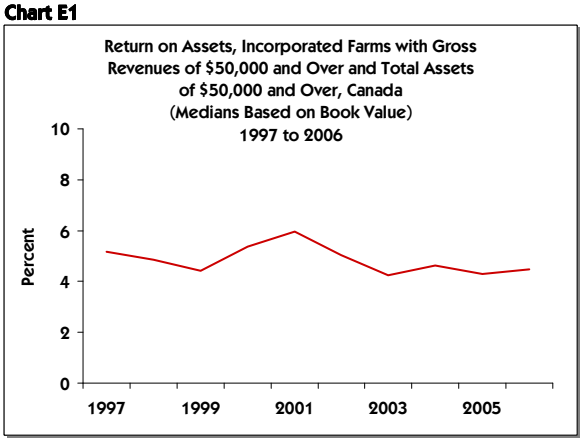
NOTE: Return on assets is =

$$\frac{\text{net farming income + interest expense}}{\text{total assets}}$$

This ratio measures the return on the total investment.

Risk is measured as the variance in returns over time.

Chart E1



Source: Statistics Canada, Corporate Taxfiler Data Base.

In 2006, the rate of return on assets was highest for fruit and vegetable farms and farms specialized in supply-management.

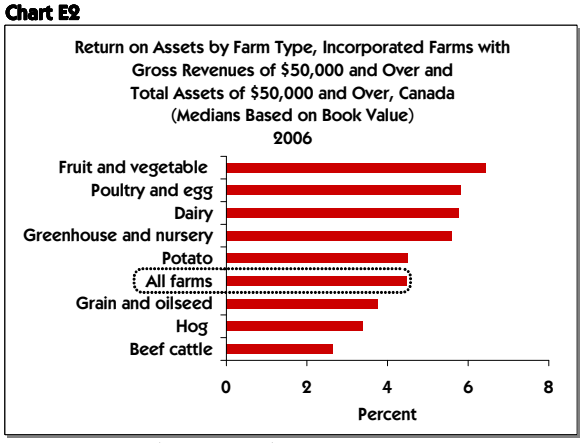
In 2006, farms reported an average return on assets of 4.5%.

Fruit and vegetable farms reported the highest return on assets of 6.4%. Poultry and egg, dairy, and greenhouse and nursery farms all reported rates of return on assets of between 5.5% and 6.0%.

Returns on assets were below 4% for beef cattle, hog, and grain and oilseed farms.

NOTE: In this section, assets are based on historical cost and are much lower than when valued at market cost. Asset ratios based on historical cost (shown here) are higher than those based on market cost.

Chart E2

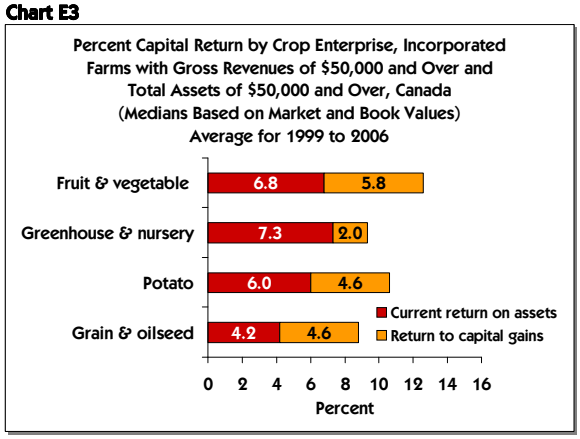


Source: Statistics Canada, Corporate Taxfiler Data Series.

8. *ROA should be higher than the loan rate at which a farm borrows, otherwise, any increase in borrowings will reduce business earnings. However, returns based on book value exclude the capital gains earned from the appreciation of assets over time.*

Land and quota based operations also have the potential to earn large capital gains from the sale of their farm assets

Chart E3

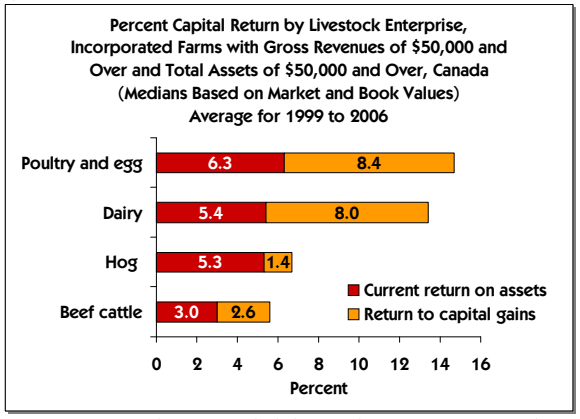


Source: Statistics Canada, AAFC internal calculations and Corporate Income Tax Database, various years.

In the crop sector, the appreciation in value of the land base gives large potential returns through capital gains.

Capital returns double for grain and oilseed farms when potential capital gains are factored into returns.

Chart E4



Source: Statistics Canada, AAFC internal calculations and Corporate Income Tax Database, various years.

In the livestock sector, the potential gain due to capital gains, is significant for the supply managed sector due to quota held.

Over the period 1999 to 2006, percent capital returns for poultry and egg farms, and dairy farms more than doubled when potential capital gains were factored into returns.

Hog farms had the smallest increase due to capital gains. Capital gains tend to be quite small for the hog sector due to their smaller land base and the wear and tear on buildings and equipment.

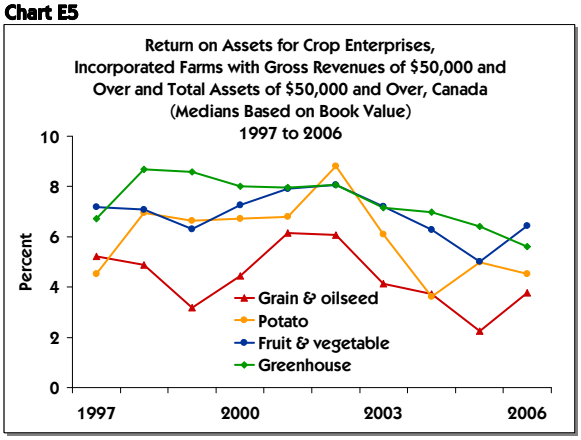
Over time, greenhouse and nursery, and poultry and egg farms have had the highest returns and the lowest yearly variability

Both potato farms and grain and oilseed farms tend to experience more year-to-year variation in rates of return compared to other crop specialties.

Potato farms had the second highest level of risk among the major farm types, with a variance of 2.4.

Usually businesses with greater year-to-year variability in returns expect higher returns to offset risks.

Chart E5



Source: Statistics Canada, Corporate Taxfiler Data Base.

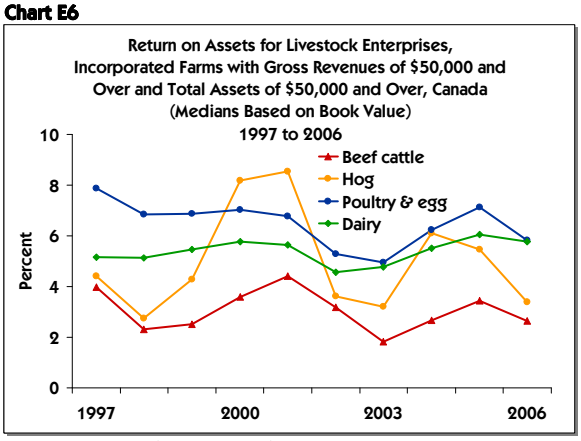
Hog farms tend to experience more year-to-year variation in rates of return compared to other livestock enterprises.

Dairy farms had the lowest year-to-year variation in returns of all major farm types and the lowest level of risk with a variance of 0.2 over the period. Beef cattle operations had the second lowest level of risk at 0.7.

Hog farms had the highest level of risk, as measured by a variance of 4.2, but had overall higher returns than beef.

Poultry and egg farms saw their average rate of return on assets decline over time from a high of 7.9% in 1997 to 5.8% in 2006.

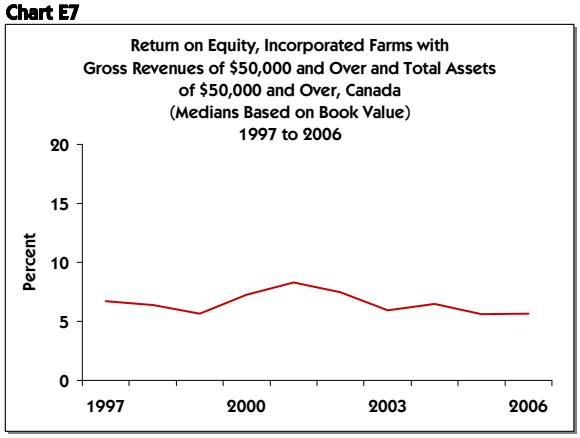
Chart E6



Source: Statistics Canada, Corporate Taxfiler Data Base.

Similarly, other profitability measures such as return on equity have been relatively stable and vary by farm type

Chart E7



Source: Statistics Canada, Corporate Taxfiler Data Base.

Return on equity to the farm sector as a whole is also relatively stable.

Return on equity averaged just over 6.5% for the 10-year period.

With a level of risk of 0.82, it is twice as high as return on assets because debt must be paid first.

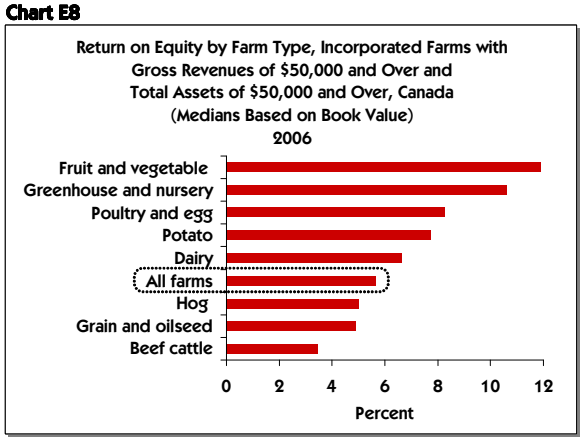
NOTE: Return on equity is =

$$\frac{\text{net farming income}}{\text{net worth}}$$

This ratio measures the return on an owner's investment.

Risk is measured as the variance in returns over time.

Chart E8



Source: Statistics Canada, Corporate Taxfiler Data Series.

The rate of return on equity in 2006 reported by fruit and vegetable farms was 11.9%, twice the rate of 5.7% reported for all farms.

Greenhouse and nursery farms reported the second highest return at 10.5%. Poultry and egg farms and dairy farms reported rates of return on equity in 2006 of 8.3% and 6.6%, respectively.

Rates of return will change for 2007 and 2008 as the impacts of rising grain and oilseed prices, energy prices and exchange rates affect profitability.

NOTE: In this section, because assets are based on historical cost, equity is also much lower than when valued at market cost. Equity ratios based on historical cost (shown here) are higher than those based on market cost.

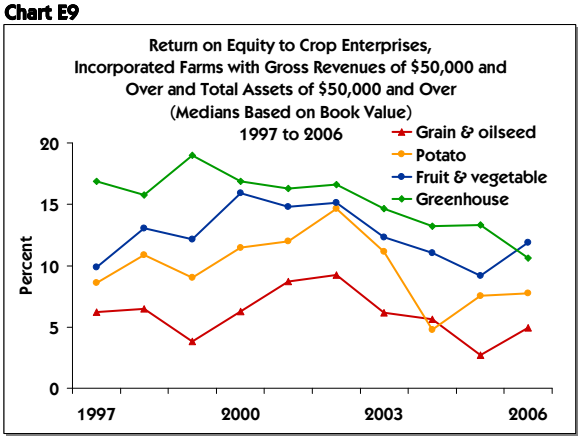
However, some farm types experienced more variability in returns on equity than others

Greenhouse and nursery farms, and fruit and vegetable farms tend to have the highest rates of return on equity over time.

Both potato farms and greenhouse and nursery farms had the second and third highest levels of risk in terms of return on equity at 7.84 and 5.77, respectively, after hog farms (shown below).

Greenhouse and nursery farms saw average return on equity declines from a high of 19% in 1999 to 10.6% in 2006.

Chart E9



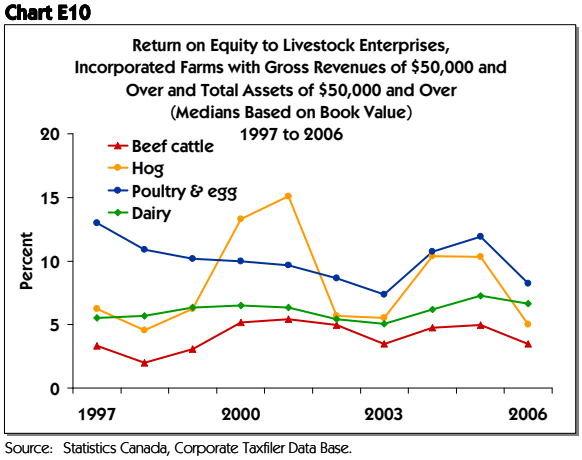
Source: Statistics Canada, Corporate Taxfiler Data Base.

Poultry and egg farms generated the highest rates of return on equity among the major livestock farm types.

Dairy farms have the lowest year-to-year variation in returns of the major farm types and the lowest level of risk at 0.44. Beef cattle operations had the second lowest level of risk at 1.28.

Hog farms had the highest level of risk. This was due to the wide fluctuations in hog prices and feed costs over the period.

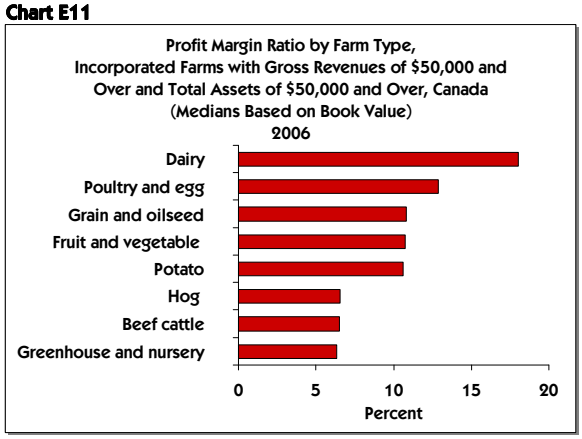
Chart E10



Source: Statistics Canada, Corporate Taxfiler Data Base.

Profitability per dollar of gross revenue earned was highest for dairy farms, and poultry and egg farms and varies by size of farm in 2006

Chart E11



Source: Statistics Canada, Corporate Taxfiler Database.

Farms specialized in supply-managed products had the highest profit margins in 2006.

The profit margin ratio varies by farm type due to numerous structural, market and biological differences. These ratios cannot be compared across farm types in regards to relative performance.

In 2006, the highest margins were reported by dairy farms at 18% and poultry and egg farms at 13%. Cost of production pricing has helped maintain margins for this group.

Lower margins can be offset by higher sales volume as is the case for greenhouse and nursery farms. A higher sales volume can compensate for a lower margin in the form of higher net income.

NOTE: The profit margin ratio is =

$$\frac{\text{net farming income + interest expense}}{\text{gross revenue}}$$

This ratio is used to measure the ability of a business to control costs in relation to revenues.

The level of investment in fixed assets relative to gross revenues is important to understand the underlying asset structure required for each farm type

Dairy farms and grain and oilseed farms have higher requirements for fixed assets in generating gross revenue.

Dairy farms have the highest capital turnover ratio at 331%. However, since the fixed assets include quota as part of the capital turnover ratio, it is not surprising that dairy is highest.

Grain and oilseed farms are second highest with a capital turnover ratio of 272%. This is due to the large investment that is required to have a full line of machinery. To become more efficient, grain and oilseed farms could spread their machinery costs over more acres, thereby reducing their capital turnover ratio. The higher grain prices in 2007 will increase revenues for grain and oilseed farms which may result in a decrease in this ratio.

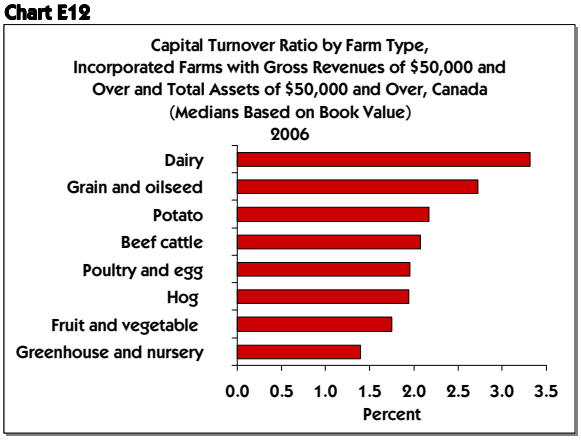
The capital turnover ratio can only be compared to similar sized farms within the same enterprise and region.

NOTE: The capital turnover ratio is =

$$\frac{\text{fixed assets}}{\text{gross revenue}}$$

The lower the ratio, the more effective the farm is in utilizing the fixed assets owned by the farm business.

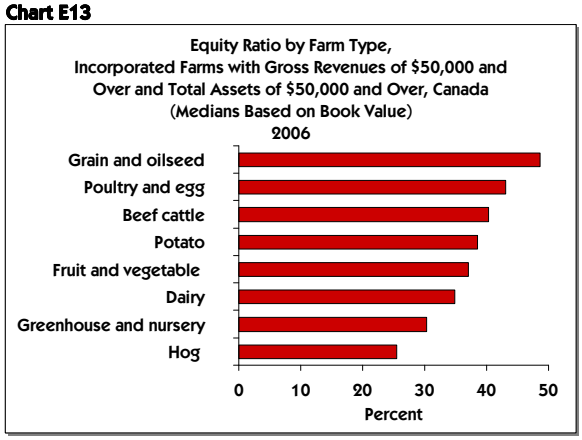
Chart E12



Source: Statistics Canada, Corporate Taxfiler Database.

The extent to which the farm businesses can meet their long-term debt commitments varies by farm type

Chart E13



Source: Statistics Canada, Corporate Taxfiler Database.

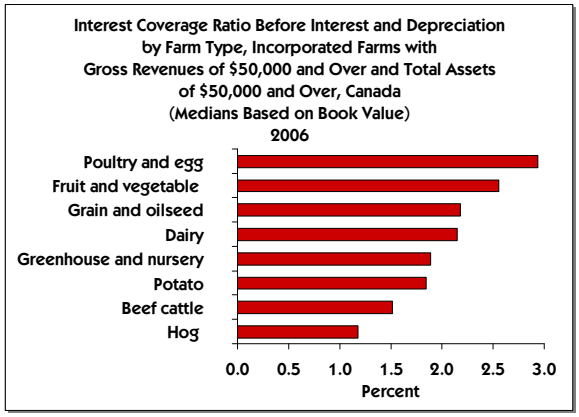
Owners of grain and oilseed farms, and poultry and egg farms have greater equity in their farm operations.

The lower the equity ratio, the more willing the business is to using debt financing. Hog farms have the lowest level of equity at 25% followed by greenhouse and nursery operations at 30%.

Grain and oilseed farms have the highest equity ratios at 49% followed by poultry and egg farms at 43% and beef cattle operations at 40%.

NOTE: The equity ratio shows the extent of asset ownership. The higher the ratio, the lower the financial risks. The higher the value of the ratio, the more resources supplied by the owners and less by creditors, and, in most cases, the more solvent the business.

Chart E14



Source: Statistics Canada, Corporate Taxfiler Database.

Poultry and egg farms and fruit and vegetable farms are better able to pay the interest on debt.

Poultry and egg farms and fruit and vegetable farms had the highest interest coverage ratios of 294% and 255%, respectively.

Hog farms had the lowest interest coverage ratio in 2006 of 118%. An interest coverage ratio below 100% would indicate that the company is not generating sufficient revenues to satisfy interest expenses. Given the recent increase in feed prices, the interest coverage ratio is likely to decline in 2007 and 2008 for livestock.

NOTE: The interest coverage ratio is =

$$\frac{\text{net farming income + interest expense}}{\text{interest expense}}$$

It measures the ability of the business to pay the interest on debt.

In general, Canadian farm businesses are in a good position to meet their financial obligations as debt comes due without disrupting normal operations

Beef cattle operations and grain and oilseed farms tend to have higher liquidity than other farm types.

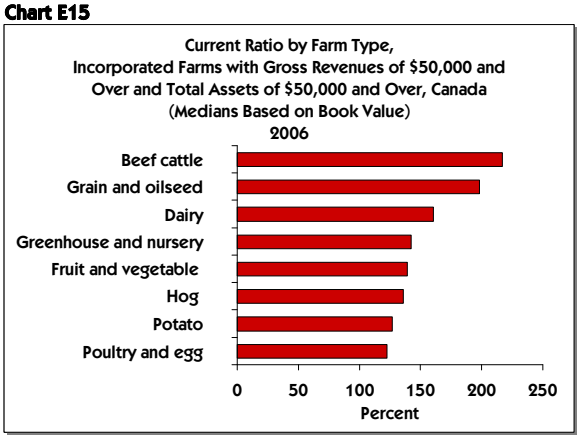
Businesses are considered to be liquid when the current ratio is greater than 100%.

Beef cattle farms and grain and oilseed farms had the highest current ratio in 2006 of 217% and 198%, respectively, due to the value of inventory which could be sold relatively quickly.

Poultry and egg farms have the lowest current ratio at 122%. This is to be expected since they do not need a large amount of working capital due to their short production cycle (broilers have a 6 week cycle).

Both hog farms and potato farms also had low current ratios due to low prices for hogs at the end of the calendar year and low yields for the 2006 potato crop.

Chart E15



Source: Statistics Canada, Corporate Taxfiler Database.

NOTE: The current ratio is =

$$\frac{\text{current assets}}{\text{current liabilities}}$$

It measures the ability of the business to meet its financial obligations as they come due.

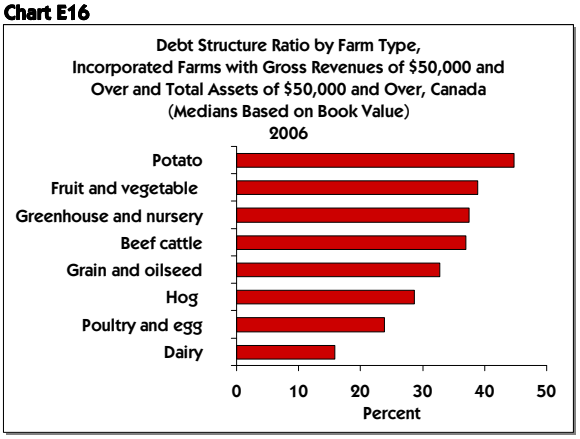
Dairy farms and poultry and egg farms tend to carry less short term debt to long term debt.

Potato farms, on the other hand, need large amounts of short term debt because they have high input costs and they have only one crop per year. This means then that they cannot pay off their short term debt until the crop for the year is converted to cash.

Dairy farms have the lowest debt structure ratio at 16% due to the fact that they get paid every month.

Poultry and egg farms are second at 24%. They do not need large amounts of short term debt because they have such a short production cycle.

Chart E16



Source: Statistics Canada, Corporate Taxfiler Database.

NOTE: The debt structure ratio is =

$$\frac{\text{current liabilities}}{\text{long-term liabilities}}$$

It measures the portion of short-term to long-term debt.

SECTION F

Farm Family Well-Being

The economic well-being of most Canadian farm families depends on income generated from both farm and non-farm activities. As a result, for most farm families, farm business decisions are determined by the allocation of their time between each of these activities. Large farms are better able to achieve economies of scale and maximize profitability. Small farms, while often unprofitable from a farm business perspective, remain as a part of the farm community by combining farm and non-farm activities to improve their overall financial performance thereby compensating for the scale disadvantages of their farm businesses (ERS, 2007).

This section examines the economic well-being of farm families in Canada, including:

- family income
- importance of farm sources of income
- prevalence of low family income
- comparison to non-farm neighbours

Farm family data is derived from a number of different taxfiler data series. To maintain consistency throughout the family well-being section, the farm family income definition used in this section is equal to the farm family's share of net farming income as reported on their taxation form (which is after depreciation and other non-cash expenses) plus all other sources of income of the farm family.

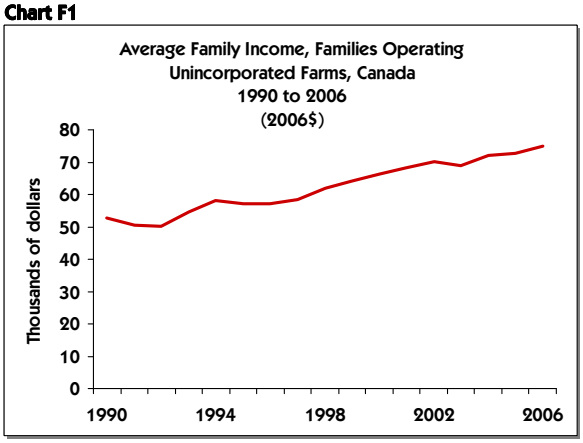
Taxfiler family data is only available for unincorporated farm families. Families operating incorporated farms are not included because of the difficulty in identifying the business owners to correctly link T2 incorporated business tax records to the general T1 tax records for farm operators and farm families.

Farm family income is increasing over time, as family wages and salaries continue to rise

Farm family income is trending upward in real terms.

Between 1990 and 2006, average family income for Canadian farm families operating unincorporated farms increased 42% in real terms from $52,619 in 1990 to $74,920 in 2006.

Chart F1



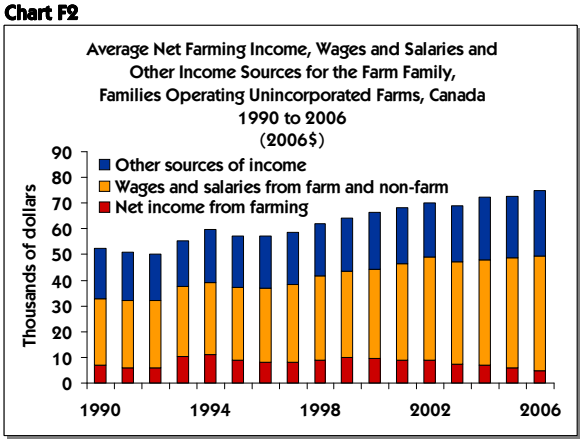
Source: Statistics Canada, Taxfiler Data Series, families operating unincorporated farms, various years.

Wages and salaries are trending upward resulting in higher family income.

Between 1990 and 2006, wages and salaries earned by the farm family increased 74% to $44,602 in 2006. Wages and salaries families earn come from either work done on the farm, non-farm work or both. Throughout the period of 1990 to 2006, around three-quarters of farm families reported earning wages and salaries from at least one of these two sources.

Over the same period, the family's share of net farming income declined 30% in real dollars. Other sources of family income increased 29% over the period.

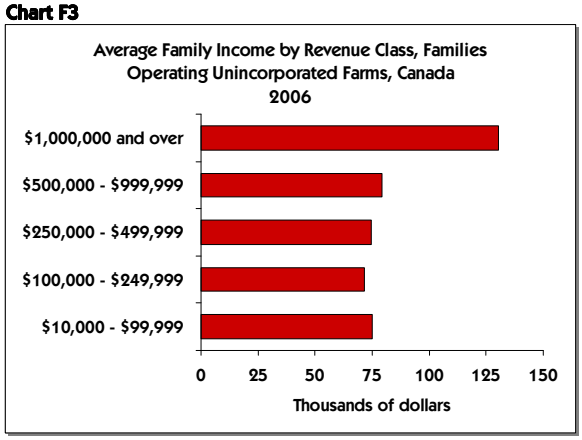
Chart F2



Source: Statistics Canada, Taxfiler Data Series, families operating unincorporated farms, various years.

Farm family income is highest for farm families operating very large farms and lifestyle farms

Chart F3



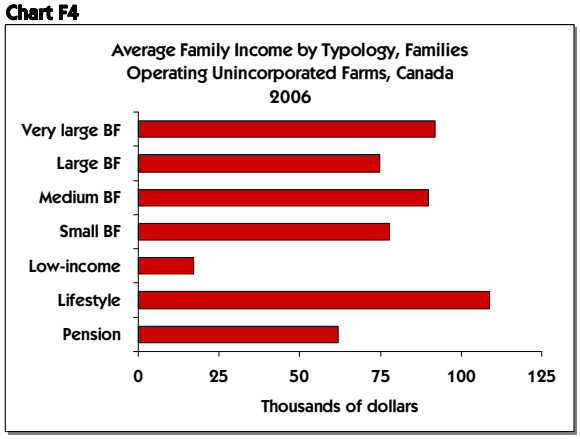
Source: Statistics Canada, Taxfiler Data Series, families operating unincorporated farms, 2005.

On average, family income tends to increase with farm size.

In 2006, average farm family income ranged from $71,617 for families operating medium-sized farms with gross revenues of $100,000 to $249,999, to $130,555 for families operating million-dollar operations.

Family income increased for all revenue classes except the $250,000 to $499,999 category, which declined 0.9% between 2005 and 2006.

Chart F4



Source: Statistics Canada, Taxfiler Data Series, families operating unincorporated farms, 2005.

A further breakdown by typology shows that even among smaller farms, some farm families have high family income.

Lifestyle farms and very large business-focused farms have the highest average farm family incomes.

For lifestyle farms, wages and salaries are largely responsible for their high family income and are used to cover loses from the farm.

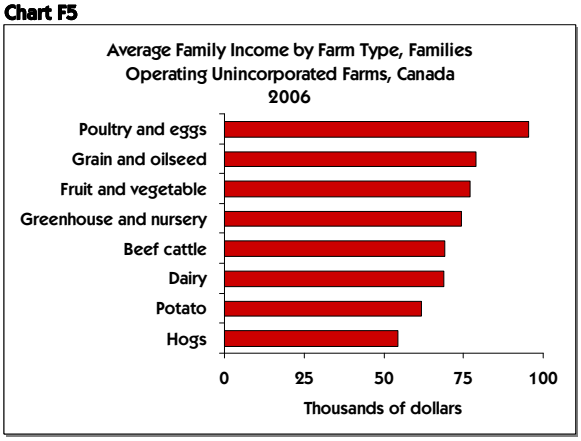
Farm family income is also higher for some farm types and some provinces

Farm family income is variable by farm type.

Families operating poultry and egg farms tend to report the highest average family income. In 2006, they reported an average family income of $96,870, up 9.7% from 2005.

Between 2005 and 2006, average family income fell for families operating hog farms (down 10%) due to declining prices for hogs. Family income also fell for potato farms (down 14%).

Chart F5



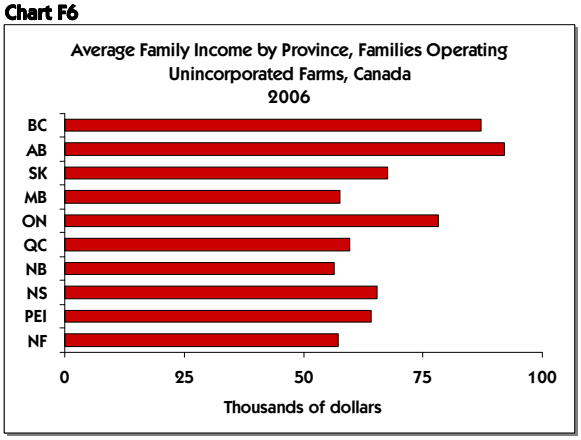
Source: Statistics Canada, Taxfiler Data Series, Families operating unincorporated farms, 2006.

Family income varies by province.

Farm families in Alberta, British Columbia and Ontario reported the highest family incomes in 2006. Ease of access to non-farm employment is the likely reason for the higher family incomes in these provinces.

Between 2005 and 2006, family income increased in all provinces with the exception of Quebec. Farm family income increased the most in Western Canada, with the largest increases reported by families in Saskatchewan (up 11%), Alberta (up 11%) and British Columbia (up 10%). Growth in mining, oil and construction improved employment opportunities in this region.

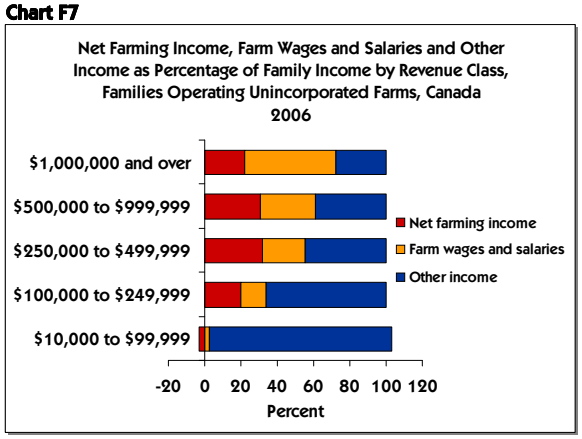
Chart F6



Source: Statistics Canada, Taxfiler Data Series, Families operating unincorporated farms, 2005.

Reliance on farm sources of income is of greater importance to some revenue classes and typology groups

Chart F7



Source: Statistics Canada, Taxfiler Data Series, 2005 and AAFC internal calculations, families operating unincorporated farms.

Larger farms rely more heavily on income from the farm.

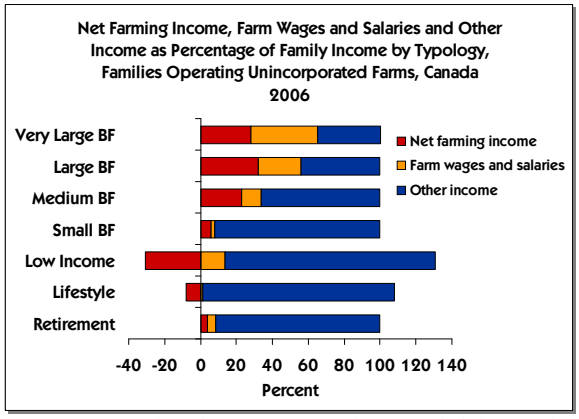
The larger the farm, the heavier the reliance on income from the farm, whether derived from net farming income or through farm wages and salaries paid to family members.

In general, families operating small farms receive 100% of family income from non-farm sources of income.

NOTE: Measuring reliance on non-farm income is not clear-cut as in past decades because the family's other sources of income can include income derived indirectly from the farm.

- Wages and salaries can include wages and salaries to family members for work done on the farm.
- Investment income can include the taxable amount of dividends received from ownership of an incorporated farm business as well as land rental income.
- Other income can include the government portion of NISA and AgriInvest for unincorporated farms.

Chart F8



Source: Statistics Canada, Taxfiler Data Series, 2005 and AAFC internal calculations, families operating unincorporated farms.

Farm sources of income is more important to the medium, large and very large business-focussed groups.

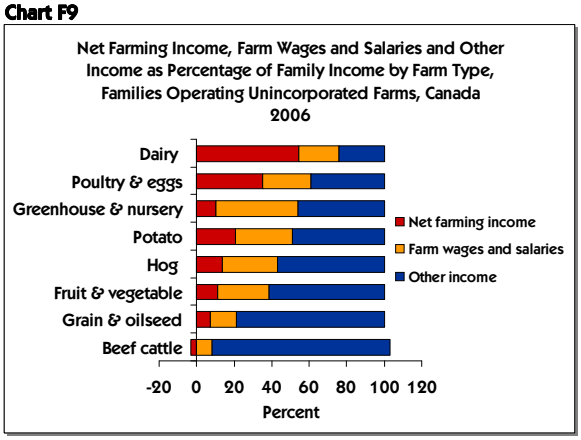
The very large business-focussed group has the heaviest reliance on income from the farm. Close to 60% of family income of the very large business-focussed group is from the families share of net farming income and from farm wages and salaries.

While size and business-intentions are important factors in determining reliance on farm sources of income, farm type and region are also important

Reliance on farm sources of income is more likely on farms with labour-intensive enterprises.

High labour-intensive farm types such as dairy, poultry and egg, greenhouse and nursery, and potato farms rely to a greater extent on income from the farm, whether from net farming income or wages paid for farm work. Whereas families operating less labour-intensive farms types need to have non-farm income.

Chart F9

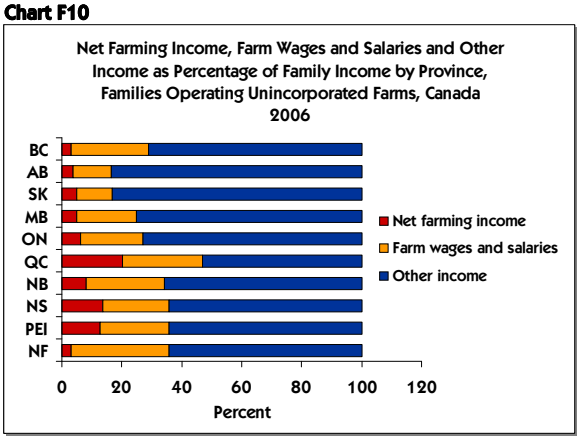


Source: Statistics Canada, Taxfiler Data Series, 2005 and AAFC internal calculations, families operating unincorporated farms.

Reliance on farm sources of income varies by province.

In recent years, farm families in Eastern Canada and Quebec received a higher share of income from the farm than families in Ontario and Western Canada.

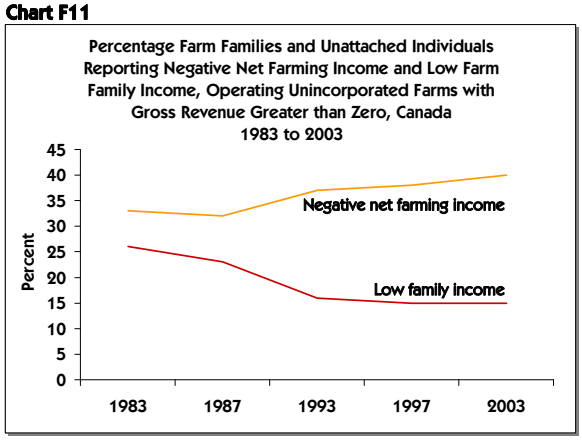
Chart F10



Source: Statistics Canada, Taxfiler Data Series, 2006 and AAFC internal calculations, families operating unincorporated farms.

There is little correlation between the prevalence of low farm family income and negative net farming income

Chart F11



Source: Statistics Canada, Longitudinal Administration Database, families and unattached individuals with positive gross revenue from farming, various years.

The trends between low family income and negative net farming income of farm families are diverging.

Between 1983 and 2003, the percent of farm families with low family income fell from 27% to 16%.

During this same time period, the percent of farm families reporting negative net farming income has increased from 33% to 40% among families operating unincorporated farms.

The decline in farm families with low family income is due to increasing non-farm self-employment income.

The rise in negative net farming income is in part due to tax changes which make it easier for unincorporated businesses to pay family members a salary for farm work and reduce net farming income.

NOTE: Families (and individuals) with low income are identified using the LIM (Low Income Measure) which defines low family income as half (50%) of the median family income in Canada adjusted for family size and composition.

Chart F12

Distribution of Farm Families, by Negative Net Farming Income and Low Family Income, Families Operating Unincorporated Farms, Canada 2006

COMMODITY	NEGATIVE NET INCOME FROM FARMING	POSITIVE NET INCOME FROM FARMING	TOTAL
	Percent of Farm Families		
Below LIM	10.8	11.0	21.8
Above LIM	32.0	46.2	78.2
TOTAL	42.8	57.2	100.0

Source: Statistics Canada, Taxfiler Database, families operating unincorporated farms, 2005.

Negative net farming income is not a strong factor for determining which families have low family income.

Families with low family income are evenly split into those with negative net farming income and those with positive net farming income.

In 2006, 10.8% of farm families reported negative net farming income and low family income.

By comparison, 11.0% of farm families reported positive net farming income and low family income.

A small percentage of farm families are experiencing multiple years of low family income

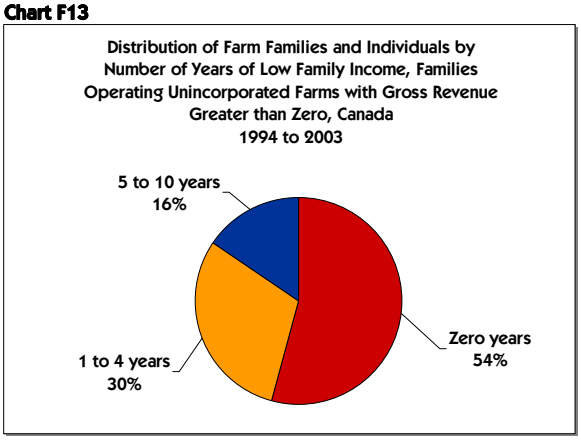
Between 1994 and 2003, 16% of farm families reported 5 or more years of low family income.

This share is similar for non-farm families.

Low income measures do not take into account the level of family wealth.

NOTE: Families (and individuals) with chronic low family income report low family income for 5 or more years out of a selected 10 year period.

Chart F13



Source: Statistics Canada, Longitudinal Administration Database, families and unattached individuals with positive gross revenue from farming, 1994 to 2003.

Chronic negative net farming income only increases the incidence of chronic low family income on commercial-sized farms.

On farms, with gross revenue of $500,000 and over, the frequency of chronic low family income was:

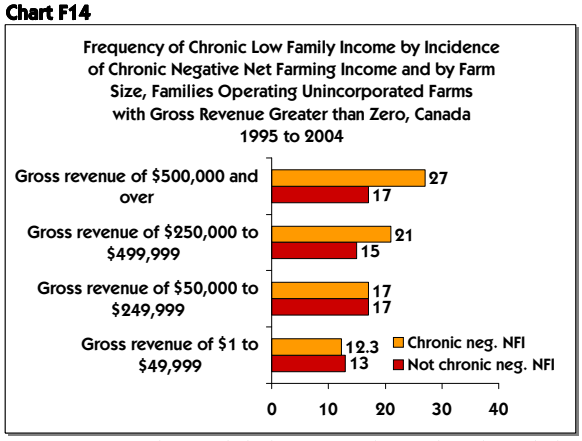
- 27% for the farms with chronic negative net farming income versus,
- 17% for the farms without chronic negative net farming income.

Similarly on farms, with gross revenue of $250,000 to $499,999, the frequency of chronic low family income was:

- 21% for the farms with chronic negative net farming income versus,
- 15% for the farms without chronic negative net farming income.

There is no relationship between chronic low family income and chronic negative net farming income on farms with gross revenue of less than $250,000. Families in this group tend to rely much more heavily on non-farm income, weakening the relationship between negative farm income and low family income.

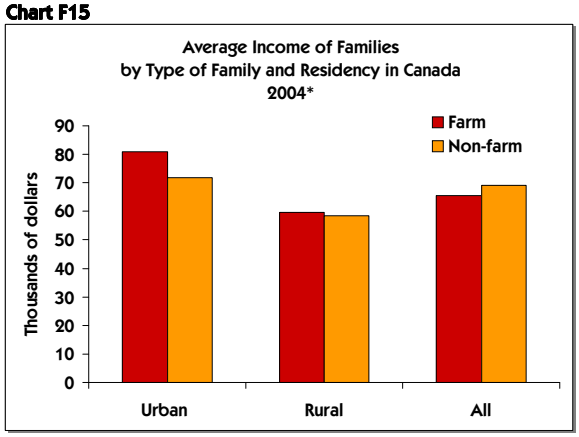
Chart F14



Source: Statistics Canada, Longitudinal Administration Database, families and unattached individuals with positive gross revenue from farming, 1994 to 2003.

In terms of overall economic well-being, farm households are relatively better off compared to other households in Canada

Chart F15



Source: Statistics Canada, Longitudinal Administration Database, 2005.
Note: * Before-tax household income of families and individuals.

The income of farm households is slightly higher than that of their non-farm neighbours.

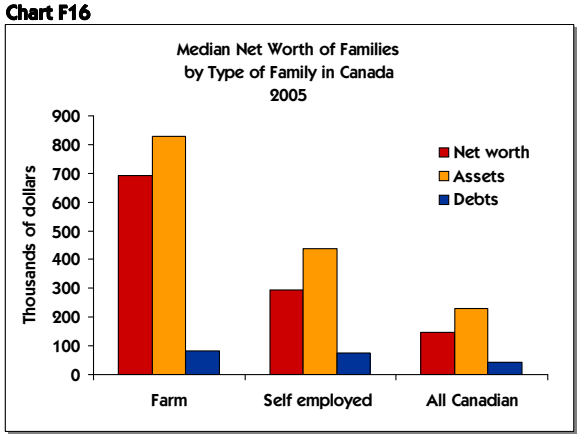
When comparing the vast majority of farm families against their counterparts (i.e., rural families), average farm family income actually exceeded that of the average non-farm family.

In 2004, the average income of rural farm households was $59,600 compared to $58,400 for rural non-farm households.

Similarly, the average income of urban farm households was $80,900 compared to $71,800 for urban non-farm households.

Overall average household income of farm households is 5% less than the average of non-farm households. This is because there are so few farm families living in urban areas relative to rural areas and so many non-farm households in urban areas relative to rural areas.

Chart F16



Source: Statistics Canada, 2005 Survey of Financial Security and 2006 Farm Financial Survey.

However, the net worth of farm families is significantly higher than the net worth of the non-farm population.

In 2005, the median net worth of farm families was $691,000, while that of non-farm families and unattached individuals was $148,000. For families and individuals who were self-employed, median net worth was $295,000.

Debt levels are similar for families with non-farm self-employed compared to farm families, however, net worth is much higher for farm families.

Glossary

Book Value

Purchase value of fixed assets less accumulated depreciation. Fixed assets may be tangible items such as land, buildings, equipment and furniture with a useful business life of greater than one year; or they may be intangible items such as goodwill and intellectual property.

Business-Focussed Farms

A family farm with gross revenues of $10,000 and over that does not fall into the pension, lifestyle or low-income farm typologies.

Capital Cost Allowance

Depreciable properties such as buildings and equipment wear out or become obsolete over time, and businesses can deduct the cost of this depreciation over a period of several years. Capital Cost Allowance (CCA) is the means by which Canadians may claim depreciation expense for tax purposes. CCA is a non-refundable tax deduction that reduces taxes owed by permitting the cost of business-related assets to be deducted from income over a prescribed number of years. There is no penalty for failing to claim Capital Cost Allowance. When a taxpayer claims less than the full amount of CCA to which he or she is entitled, the pool remains intact and available for claims in future years.

Capital Cost Allowance Recaptured

If at the end of a taxation year the capital cost allowance for any class of depreciable assets has a negative balance (because the deduction on sale exceeds the balance in the class) then the negative balance is included in business income as a "recapture" of excess previous year's depreciation.

Capital Turnover Ratio

This ratio is equal to fixed assets divided by gross revenue. The lower the ratio, the more effective the farm is in utilizing the fixed assets owned by the farm business.

Chronic Low Family Income

Families and unattached individuals who report low family income at least 50% of the time out of a 10-year time span.

Chronic Negative Net Farming Income

Families and unattached individuals who report negative net farming income at least 50% of the time out of a 10-year time span.

Corporation

An incorporated business registered with a provincial or federal agency as a legal entity separate from the owner. A family corporation is an incorporated business operation where an individual or members of a family owns the majority of the corporation shares. A non-family corporation is an incorporated business operation where a group of unrelated individuals owns the majority of the corporation shares.

Current Ratio

This ratio is equal to current assets divided by current liabilities. It measures the ability of the business to meet its financial obligations as they come due.

Debt Structure Ratio

This ratio is equal to current liabilities divided by long-term liabilities. It measures the portion of short-term to long-term debt.

Equity Ratio

The ratio of net worth to total assets. The equity ratio shows the extent of asset ownership. The higher the ratio, the lower the financial risks. The higher the value of the ratio, the more resources supplied by the owners and less by creditors, and, in most cases, the more solvent the business.

Expense Ratio

The ratio of total operating expenses to gross revenues.

Family Income

Family income is reported in one of two ways in this publication, either as a cash income equal to net operating income plus other family income, or as pre-tax income equal to net farming income plus other family income. Both exclude capital gains from the calculation.

Other family income includes: wages and salaries for farm and non-farm work, investment income, pension income and other sources of income.

Farm Type

Farm typing is a procedure that classifies each farm according to the predominant type of production. With the Taxation Database Program (TDP) the farm type classification is based on the North American Industry Classification System (NAICS). A farm must earn at least 50% of its agricultural sales revenue from one commodity or commodity group to be classified under a particular farm type. Changes in farm type can reflect a shift in farming activity but could also be influenced by changing commodity prices.

With the Farm Financial Survey (FFS) database, the farm type classification is based on what the respondent declares to be the type of farm regardless of the source of income.

Fixed Assets

Fixed assets may be tangible items such as land, buildings, equipment and furniture with a useful business life of greater than one year; or they may be intangible items such as goodwill and intellectual property.

Gross Farm Income for Tax Purposes

The sum of gross revenues and total income adjustments which include quota sale income, capital cost allowance recaptured, inventory adjustments and non-applicable income.

Gross Revenues

The sum of agricultural revenue from crop and livestock and other revenues such as program payments, custom work and rental income, forest products, cash advances and miscellaneous income.

Highly Specialized Farms

A highly specialized farm earns 90% or more of their agricultural sales revenue from one commodity or commodity group.

Interest Coverage Ratio

This ratio is equal to the sum of net farming income plus interest expense divided by interest expense. It measures the ability of the business to pay the interest on debt.

Investment Income

This includes the taxable amount of dividends, net rental income, net limited partnership income, interest and other investment income.

Large Farm

A farm reporting gross revenues of $250,000 and over.

Lifestyle Farm

A family farm with gross revenues of $10,000 to $49,999 in which the farm family receives non-farm income of $50,000 or more and does not fall into the pension farm typology.

Low Income Group

A family farm with gross revenues of $10,000 to $249,999 in which the farm family's total family income is below Statistic's Canada's Low Income Measure (LIM) that is not classified as a pension or lifestyle farm. In 2006, this amounted to $34,874 in family income before taxes for a family of four with 2 adults and 2 children. Statistic Canada's Low Income Measure is based on a family's before tax income, which is equivalent to net farming income for tax purposes (R2050 – R2150) plus non-farm income (T6100). Tax filer estimates use this method to identify farm families below LIM. For Farm Financial Survey calculations, estimated of capital cost allowances (CCA) were added to to the LIM cut-offs to determine cut-offs before CCA.

Market Value

The price an asset might reasonably be expected to bring if sold by the owner.

Medium Farm

A farm reporting gross revenues of $100,000 to $249,999.

Micro Farm

A farm reporting gross revenues under $10,000.

Net Cash Income

Net cash income estimates for the Agriculture Economic Statistics series is derived by subtracting operating expenses from farm cash receipts. Reporting is done by calendar year on a cash basis when the money is paid to or disbursed by the farmer. Estimates are available at the provincial and national levels and include all agricultural businesses.

These data are not available by farm type, sales classes, sub-provincial regions or at the micro level.

Net cash income excludes: income earned from non-agricultural use of the farm (e.g., income from agri-tourism activities on farm); income that farm operators or their families receive from other sources (e.g., wages and salaries from non agricultural activities, and investment income); revenue or expenses from the sale or purchase of farm capital (real estate, machinery and equipment), although the interest paid on these purchases is included as an expense; capital payments where funds do not relate to current production and transfer payments (such as training allowances) directed to individuals; and unlike the Taxation Data Program (TDP), Farm Financial Survey (FFS) and Census of Agriculture, Aggregate net farming income estimates exclude farm-to-farm transactions, unless they occur across provincial or national borders. Within a province, sales from one farm are considered an expense to another, thus offsetting each other.

Net Farming Income

Gross farm income for tax purposes minus total expenses for tax purposes.

Net Market Income

Net operating income less program payments.

Net Operating Income

Gross revenue less total operating expenses.

Non-Family Farm

A farm organized as a non-family corporation, cooperative or communal operation or a farm held in estate or trust.

Other Family Income

In this paper, family income is equal to net farming income plus other family income such as wages and salaries for farm and non-farm work, investment income, pension income and other sources of income.

Operating Margin

The percentage of gross revenues to net operating income.

Pension Farm

A single generation family farm with gross revenues of $10,000 to $249,999 in which the oldest operator is either 60 to 64 years of age and receiving pension income or over 64 years of age, and where the children are not involved in the day-to-day operation of the farm.

Pension Income

The sum of Old Age Security pension, CPP and QPP benefits, net federal supplements as well as other pensions and superannuation

Profit Margin Ratio

This ratio is equal to the sum of net farming income plus interest expense divided by gross revenue. It is used to measure the ability of a business to control costs in relation to revenues.

Program Payments

This includes income from provincial stabilization programs, the now terminated Gross Revenue Insurance Plan and

other subsidies (hog incentive program, acreage payments, assistance for clearing land and government grants), plus insurance proceeds from programs (private and government) for crops and livestock, and disaster assistance payments. Dairy subsidies are not included nor are Net Income Stabilization Account withdrawals.

Return on Assets

This ratio is equal to: (net farming income plus interest expense) divided by total assets. It is used to measure the return on the total investment.

Return on Equity

This ratio is equal to: net farming income divided by net worth. It is used to measure the return on an owner's investment.

Risk

Measured as the variance of return on assets or return on equity over time. The greater the variance, the higher the level of risk.

Small Farm

Farms reporting gross revenues of $10,000 to $99,999.

Total Operating Expenses

The sum of total crop, livestock, machinery and general expenses. Total general expenses includes salaries, insurance, custom work, rent, utilities, interest expense, property tax expense, building and fence repairs, marketing expense and other miscellaneous expenses. The capital cost allowance (CCA), the allowance given for wear and tear on depreciable assets, is not included in the estimate of total operating expenses.